



Analysis of the training of undergraduate students and the influence on clinical aspects and lifestyle

Análise da formação de alunos de graduação e a influência sobre aspectos clínicos e modo de vida

DOI: 10.56238/isevjhv3n1-015

Receipt of originals: 11/01/2024

Publication acceptance: 02/02/2024

Cristiane de Cassia Paneli¹, José María Gusmán Ferraz², Zildo Gallo³

ABSTRACT

The objective of this study was to investigate whether the training obtained during undergraduate courses in Business Administration, Agronomic Engineering, Physical Therapy, Law, Nutrition, Physical Education and Biology influences the general clinical aspects and quality of life of students. This was an exploratory study with a qualitative-quantitative approach through a literature review with a bibliometric approach and an online self-completed questionnaire, addressing the different subjects related to the theme of the work. It is expected with this work to propose actions that make it possible to improve the quality of life of students through guidance on the practice of physical activity and adequate nutrition, as well as guidance and help in the emotional aspect in order to provide a better understanding of reality, for a more critical and relevant action regarding the nutritional aspect, demonstrating the need to provoke an awareness through education and an improvement in the quality of life regardless of the area of training, so that the challenges are actually faced during the professional journey.

Keywords: Quality of life, University students, Professional challenges.

INTRODUCTION

The different perceptions of academics on environmental issues and quality of life is an important topic to be analyzed and discussed. Studies that address the sensations and perceptions that students have during their academic journey, in the aspect of food, environment and physical activity will be analyzed in this work.

The work was developed at the Centro Universitário de Santa Fé do Sul - UNIFUNEC, a higher education institution in the interior of São Paulo, in the city of Santa Fé do Sul.

¹ Uniara - University of Araraquara - SP
E-mail: cpaneli@uniara.edu.br

² Uniara - University of Araraquara - SP
E-mail: ze2cordoba@yahoo.es

³ Uniara - University of Araraquara - SP
E-mail: zildo-zgallo@uniara.com.br



Throughout their academic lives, students develop personally and socially with different implications for their quality of life. Currently, the term quality of life is not only linked to economic growth, but also to social development, related to education, health, leisure, among others (VIANA et al., 2019).

By relating this term to the area of health, health promotion is highlighted and is based on the understanding of the main human needs. In its most focused sense, it is centered on the ability to live in the absence of disease or to overcome conditions of morbidity (MINAYO et. al., 2000). Some authors associate quality of life with happiness. Happiness is a different vision for each person, some associate the theme with work, because they believe that through this activity they are achieving the goals they have always dreamed of; Other people understand that happiness is found in leisure, traveling, partying, or being at home with family.

Since ancient times, philosophers have debated what the concept of happiness is. Professionals in the scientific field continued the work of the ancients in search of the best definition for the theme, for a more sustainable promotion of well-being (PALA, 2020).

An assessment of dietary patterns is important when considering the quality of life of a given population.

According to Si Chieri et al, in 2003 people have been consuming more fats, sugars and ultra-processed foods and vegetables and fruits are increasingly forgotten by them. As a result, chronic diseases have been increasing in the population. Social, economic and lifestyle characteristics, as well as marital status, household size and ethnicity are associated with these changes. Dimensions such as physical, economic, political and sociocultural environment characterize regulations, standardizations, quality and availability of food for a group of individuals.

In addition to taking care of the diet to have a more adequate quality of life and health, physical activity practiced regularly results in benefits in chronic-degenerative dysfunctions, hypertension, diabetes, osteoporosis and metabolic diseases (COLLET et al., 2008). Thinking about public health, active populations with healthier lifestyles contribute to the reduction of costs investments in this regard.

The adherence by the population to the practice of physical activity has a positive influence on environmental preservation, that is, the action, the behavior of these individuals, in choosing pleasant environments for walking, running or any sport that is done in an open, organized, clean and wooded environment, will be directly linked to the fact of maintenance of



public spaces and consequently the preservation of the environment. bearing in mind that this is the place used by them to practice their activity or leisure (SILVA et al., 2013).

Advances in research on university students in the context of quality of life and well-being in different socio-cultural situations will contribute significantly to understanding dietary trends, making it an attractive approach. Thus, the objective of the study will be to verify the quality of life, eating habits, and the frequency of physical activity of different university groups during their academic career.

RATIONALE

Today's society will have to rethink its values so that it does not continue to act as if nature were endowed with infinite resources. Our planet is crying out for help, its natural resources are increasingly scarce and pollution is increasing. The study of environmental perception, as well as quality of life, is of fundamental importance in order to understand the interrelations between Man and the environment, their expectations, satisfactions and dissatisfactions, judgments and behaviors and to make them aware that they are part of this nature.

With a diagnosis of the environmental perception of the public studied, environmental practices and projects can be carried out to meet the deficiencies found in this community. With this, society in general will benefit, since the institution is a trainer of people and ideas that will be taken by these future professionals.

Over the years, the term Quality of Life has received a variety of definitions, which can be based on three basic principles: socioeconomic status, functional capacity, and satisfaction. It can also be related to emotional and nutritional status, physical capacity, intellectual activity, social interaction, economic situation and health.

The World Health Organization (WHO) classifies quality of life as "the individual's perception of his or her position in life, in the context of the culture and value system in which he or she lives, and in relation to his or her goals, expectations, standards, and concerns" (WHO, 1998). The World Health Organization Quality of Life Group (WHOQOL Group) has developed a scale within a cultural perspective to measure quality of life in adults, the WHOQOL-100, and its abbreviated version, the WHOQOL-bref.

Healthy foods are responsible for providing energy and nutrients to the body, controlling blood pressure, preventing obesity, and releasing neurotransmitters responsible for feeling well-being, in addition to other benefits. It is well known that a good diet should be composed of



vitamins, fiber, carbohydrates with low glycemic content and caloric density, found in unprocessed or minimally processed foods. Diet is also linked to disposition and physical endurance, which combined with regular water intake, physical exercise and adequate sleep, reduce stress levels, prevent obesity and other health benefits. For those who practice some physical activity regularly, diet is a fundamental factor to achieve good performance. Therefore, it must be balanced and complete so that the body performs all its functions properly and ensures a good result.

According to the principles of healthy eating, all food groups should be part of the diet of a physical activity practitioner. A balanced diet should provide water, carbohydrates, proteins, lipids, vitamins and minerals. It is worth noting that no specific food, or group of them alone, is enough to provide all the nutrients necessary for good nutrition. For the practice of physical activity, the diet should be adequate according to each type of physical exercise. Before you know what to eat, you need to know what you are going to practice, the intensity and the duration of the exercise. The diet must be adjusted to meet all the energy demand necessary for the proper execution of the physical practice.

Entering the University is a stage marked by intense changes in the student's life, representing, for many, the moment when they will have to take responsibility for their diet. In this way, several factors can influence eating behavior, resulting in practices that can generate health risks.

Analyzing these aspects and whether there is a correlation between the courses in which students are graduating, combined with an analysis of the curricula, can indicate whether the training is being effective in relation to expected behavioral changes.

LITERATURE REVIEW

QUALITY OF LIFE

According to Sanches 2019, there are several detailed studies in Brazil and around the world on quality of life – a term often combined with lifestyle and living conditions – and the most appropriate instruments for their assessment. Differentiating health status through mental health, physical function, and social function is important to define quality of life.

Physical function is important to assess health status, but when it comes to quality of life, factors such as mental health and psychological and social well-being become important tools for possible assessments (ROLA, 2018).



The need for short instruments that require little time to complete, but with satisfactory psychometric characteristics, led the WHO Quality of Life Group to develop an abbreviated version of the WHOQOL-100, the WHOQOL-bref (WHOQOL Group, 1998), composed of 26 questions, divided into four domains (Physical, Psychological, Social Relationships and Environment). The WHOQOL-bref questions were formulated for a Likert-type scale of responses, with a scale of intensity (ranging from nothing to *extremely*), ability (ranging from *nothing to completely*), *frequency* (ranging from never to always) and *evaluation* (ranging from very dissatisfied to very satisfied or very bad to very good). According to Dias et al, 2021, the domains present in this questionnaire are:

- **Domain I** – physical, focusing on the following facets: pain and discomfort, energy and fatigue, sleep and rest, activities of daily living, dependence on medication or treatments, work capacity;
- **Domain II** – psychological, whose facets are: positive feelings, thinking, learning, memory and concentration, self-esteem, body image and appearance, negative feelings, spirituality, religiosity and personal beliefs;
- **Domain III** – social relationships, which includes: personal relationships, social support, sexual activity;
- **Domain IV** – environment, addressing: physical safety and security, home environment, financial resources, health and social care: availability and quality, opportunities to acquire new information and skills, participation in, and opportunities for recreation/leisure, physical environment: pollution, noise, traffic, climate, transportation.

HEALTHY EATING

The changes in the eating behavior of society, related to the socioeconomic transitions that took place during the period of the industrial revolution, through the process of globalization and the opening of agricultural frontiers and international markets for food distribution, have been observed.

According to Tremea, 2019 over the years has seen an increase in the consumption of meat and dairy products, as a result of the increase in average income and population growth in developing countries. Mesquita e Bursztyn 2018, indicate that there will be a 73% and 58% increase in meat and milk production, respectively, by 2050 as a result of demand due to population and economic transitions in emerging countries.



The diet traditionally based on local products and without chemical additives has gradually been replaced by a diet dependent on additive-rich, processed and packaged empty calorie products (MILLER, 2022).

According to Bruna et al, 2022, in Brazil it has been observed that since 2016 sustainable food systems have been strengthened, but the human right to adequate food (DHAA) and to the realization of food and nutrition security (FNS) has been weakened, contributing to the increase in poverty and the worsening of the living conditions of considerable portions of the population. With COVID-19 and due to the political crisis, the Household Budget Survey (POF 2017-2018) shows that the prevalence of food insecurity in the country increased to 36.1% (it was 22.9% in 2013), and 3.1 million families experienced hunger (BRUNA et al, 2022). The State of Food Security and Nutrition in the World indicates that 11% of the population suffers from hunger, aggravated by climate change. This study was carried out by the UN, aiming to end hunger and malnutrition by 2030 in the adoption of the 2030 Agenda for Sustainable Development (MENEZES, 2019).

According to the Federal Council of Nutrition 2022, Brazil is considered one of the largest food producers, but this same country has 33.1 million people with severe food insecurity, which is when there is a quantitative reduction in food among children, due to the lack of food the same country that is the world champion in the use of pesticides, It does not have the highest productivity, and the country that is one of the largest holders of biodiversity has one of the highest rates of deforestation and species at risk of extinction.

The search for a sustainable system for food production and biodiversity conservation, as well as ways to reduce greenhouse gas emissions, has been essential in the food sector (MESQUITA e BURSZTYN 2018). The population's perception of the climate and food issues is of great importance in the search for solutions to the new confrontations, since they have the potential to degenerate adaptive behavioral changes and even pressures on policymakers (SPENCE et al., 2011).

According to Lousada et al., 2021, ultra-processed foods are industrially formulated with substances extracted or derived from fragmented foods and added flavorings, colorings, emulsifiers that sensorially modify the final product, in addition to being foods with a high glycemic index and toxic additives released from synthetic packaging, causing intestinal inflammatory problems.

Lanzilotti, et al., 2019, through a food guide, which categorizes foods into classes such as in natura or minimally processed, processed and ultra-processed, shows that it is possible to



promote a healthy diet with a diet with products in their natural state or with minimal changes in their structures. An improvement in the quality of a population's food leads to a healthier life and the use of natural foods improves the absorption of nutrients and a greater disposition for daily activities.

People decide to eat in different ways and this decision transcends a matter of taste or availability of food. It is sometimes a form of food activism, which discusses environmental, social, economic and cultural issues (AZEVEDO, 2014). One of these forms of food activism found nowadays is vegetarianism, being a dietary pattern based on foods of plant origin, which advocates the exclusion of meat from the diet, and due to environmental issues, animal friendliness or possible health benefits, adherence to vegetarianism has increased in several countries (REZENDE, 2015).

According to Bedford and Barr (2005), vegetarians have a greater health awareness than omnivores, because they eat more fruits, vegetables, and vegetables.

The breeding and slaughtering of animals in Brazil has been growing. People, despite some choosing vegetarian diets, still prefer to consume meat. Analyzing the environmental problems, it can be seen that cattle ranching, occupying a large area, causes an imbalance in ecosystems. According to Rojas et. al, 2018, about 75% of arable land is used for agriculture or for grazing to feed animals.

It is believed that a plant-based diet would contribute to the environment by reducing the greenhouse effect, since methane released from animals is one of the main gases contributing to global warming. It also restricts the large fires that take place to make room for pastures and that are harmful to the Earth's atmosphere. In addition, it would reduce the excessive use of drinking water, since there would be less demand and fewer cattle. In relation to health, it would decrease the risk of heart disease, since excessive meat consumption tends to worsen the lipid profile of the population, increasing the rate of atherosclerosis.

Rescuing natural and regional food is helping the population, improving the quality of life, combating the excessive consumption of ultra-processed foods. This change is a public health issue, promoting nutritional education and improving the prevention of chronic non-communicable diseases (NCDs) (CANELA et al, 2018).

The need to understand perceptions about possible climate change and its impacts on the food sector in a sustainable way are necessary strategies and should be aimed at a food production system that meets this demand.



PHYSICAL ACTIVITY AND QUALITY OF LIFE

Physical activity is a way to regain and maintain health while minimizing the stressful aspects of a day at work or studies. Studies show that identifying and understanding the benefits of physical activity throughout life has been of interest to academics and researchers from different scientific contexts (FERNANDEZ, 2017).

Rubio, 2006 shows in his studies that sport and physical activity reached the nineteenth century showing a tendency to project social dynamics, where political and social transformations were accompanied.

Physical exercise is a form of leisure and to restore health from harmful effects, after the initial period is overcome, it is a usually pleasant activity that brings numerous benefits to the practitioner, ranging from improving the lipid profile to improving self-esteem (OLIVEIRA, 2019).

When quality of life is related to health, the fact of living without diseases or overcoming the difficulties of morbidity conditions are considered as physical and psychological factors. Physical inactivity with a sedentary lifestyle can lead to risk factors with the worsening of coronary, cardiovascular and metabolic diseases (SALES and FERREIRA, 2011).

According to Sales and Ferreira, 2011, the systematic practice of physical exercise accompanied by a good diet and care of the mind, improves depressive and anxiety symptoms, increasing people's productivity and performance on a daily basis.

According to Sales and Ferreira, 2011, the practice of physical activity, appropriate to individual conditions and with proper instruction, brings physical, psychological and social benefits, contributing to the maintenance of physical and cognitive functions, and consequently promoting greater independence in old age.

A physically active lifestyle reduces the risks of chronic diseases including hypertension, stroke, cancer, type two diabetes, osteoporosis, osteoarthritis and depression (MEURER et al, 2012).

When we extend the effects of a physically active life beyond health and place the effects of exercise, properly performed, as an indispensable factor for improving the quality of life of a given individual, then we are starting from the premise that someone who is inactive and sedentary does not have a good quality of life.

According to Araújo and Araújo, 2000, the classification of a good or bad quality of life is directly related to the individual's way of understanding the meaning of life. Perhaps a 30-year-old individual, intellectual, artist, moderate smoker, with a normal level of stress inherent to



the profession and sedentary, is a potential candidate to contract chronic-degenerative diseases, but who, if asked about his level of quality of life, answers that he considers it good and that it satisfies him, so the question of quality of life goes through people's expectations (low or high) in relation to their life and their health.

GENERAL OBJECTIVE

- To evaluate the quality of life and general clinical aspects of students from different courses as a function of the difference in education and trajectory.

SPECIFIC OBJECTIVES

- To verify the satisfaction of students in relation to the social and emotional aspect in the last year of graduation.
- To analyze the dietary pattern of final-year students from different undergraduate courses
- To point out possibilities of psychological support for students in the last year of graduation

METHODOLOGY

The study was carried out at UNIFUNEC, an educational institution that had its beginning from the Faculty of Physical Education of Alta Araraquarense installed through Federal Decree No. 70.192/72 and maintained by ASEC – Associação Santa-fé-sulense de Educação e Cultura was born as a regional desire, considering that the nearest course of Physical Education was based in São Carlos, 400 km away. In addition, Decree-Law No. 705/69 made the practice of Physical Education compulsory at all levels of education. In 1976, Municipal Law No. 1.118, approved by CNE Opinion No. 181/77 created the Municipal Foundation for Education and Culture of Santa Fé do Sul – FUNEC. The National Council of Education authorized the change of the ASEC maintainer to FUNEC according to CNE Opinion No. 2.950/76. Thus, the Faculty of Physical Education of Alta Araraquarense began to be maintained by the Municipal Foundation of Education and Culture of Santa Fé do Sul – FUNEC. Subsequently, the Faculty of Sciences and Letters were installed with the Pedagogy Course, through Federal Decree No. 96.996/88. The Integrated Colleges of Santa Fé do Sul were born through Municipal Law No. 2,000 of January 6, 1998, with the Unified Regulations of the Integrated Colleges of Santa Fé do Sul approved according to EEC Opinion No. 614/98, as a



result of the merger of two other higher institutions: the Faculty of Physical Education of Alta Araraquarense and the Faculty of Sciences and Letters. The Integrated Colleges of Santa Fé do Sul were an isolated institution of Higher Education, maintained by the Municipal Foundation of Education and Culture of Santa Fé do Sul – FUNEC. Its historical constitution began in the 70s, shortly after the reform of Brazilian higher education that took place in the 1960s, by Law 5.540/68. The maturity acquired by the Institution and the consolidation of the quality of the teaching, research and extension offered, combined with the physical structuring, justified the request to the CEE for the transformation of the Integrated Faculties into a University Center. The University Center of Santa Fé do Sul – UNIFUNEC has three campuses, which operate during the day and at night. Its structure is legally regulated by the UNIFUNEC Regiment and the UNIFUNEC Statute.

The Integrated Colleges of Santa Fe do Sul have grown considerably over the years, with approximately 3,000 students enrolled in the following courses:

-Administration, Systems Analysis and Development, Biological Sciences, Law, Civil Engineering, Agronomic Engineering, Nursing, Physical Education (Bachelor's and Bachelor's Degrees), Physiotherapy, Medicine, Nutrition, Dentistry, Pedagogy and Psychology.

A literature review was carried out with a bibliometric approach, a quantitative and qualitative technique for measuring indices of production and dissemination of knowledge, with the advantage of collecting and processing large amounts of information (PEREIRA and BARBOSA, 2020). For this, the following descriptors were defined: quality of life, university students and general clinical aspects. The articles were collected from searches in the following electronic databases: The Scientific Electronic Library Online (SciELO); Latin American Literature in Health Sciences (Lilacs); Portal of Periodicals of the Coordination for the Improvement of Higher Education Personnel (CAPES); Google Scholar.

The survey was carried out with enrolled students and possible graduates of the year 2023 of Administration courses, Agronomic Engineering, Physiotherapy, Law, Nutrition, Physical Education and Biology.

The number of students enrolled in the last year, according to each coordinator, who were invited to participate in the research was 133 students, distributed in chart 1:

Table 1 - Courses studied

COURSE	NUMBER OF STUDENTS ENROLLED
ADMINISTRATION	18
NUTRITION	7
PHYSICAL EDUCATION (BACHELOR'S DEGREE)	20
PHYSIOTHERAPY	27
BIOLOGY (BSc)	5
AGRONOMIC ENGINEERING	19
RIGHT	37

Source: researcher herself

Previously, the project proposal was explained and the respondents were sent the free and informed consent form (ICF). After being authorized, it was the questionnaire was sent and the data collection. The form of sample collection was the method of self-completion online questionnaire, allowing a greater adherence of participants, with all students enrolled and graduating from the courses chosen by the researcher being part of the sample universe.

Thus, several questions were selected, organized into two blocks according to the objectives of the study:

- Block I refers to sociodemographic and general clinical data;
- Block II will contain questions about quality of life;

BLOCK I - SOCIODEMOGRAPHIC AND GENERAL CLINICAL DATA

The first group (block I) consists of a set of sociodemographic questions to define the sample in terms of age, weight, height and the presence/absence of metabolic diseases or other pathologies. From weight and height will be done the calculation of the body mass index (BMI) using the formula: $BMI = \text{Weight (kg)} / \text{Height}^2 \text{ (m)}$. Through BMI, the nutritional status of individuals can be classified, taking into account the values presented in Table 2:

Table 2. BMI Classification

BMI	EN CLASSIFICATION (nutritional status)
Minor 18.5	malnutrition
18,5-24,5	Eutrophy
25,0-29,9	overweight
30,0-34,9	Grade I obesity
35,0-39,9	Grade II (severe) obesity
Greater than or equal to 40.0	Grade III obesity (morbid)

Fonte: WHO, 2000



In relation to metabolic diseases and other pathologies, it was carried out a question of with the following options: diabetes, high blood pressure, osteoporosis, depression, hypercholesterolemia, cardiovascular disease, kidney disease or other report described by the participant if not on the list.

BLOCK II- QUALITY OF LIFE

In block II, we used questions asked using the WHOQOL-bref quality of life assessment instrument, developed by the Mental Health Program of the World Health Organization, consisting of 26 questions, divided into four domains (Physical, Psychological, Social Relationships, and Environment). It is a questionnaire consisting of questions referring to six aspects of the individual's life: spirituality, physical, level of independence, psychological, social relationships and environment. The WHOQOL-bref tool was used in studies published in different countries, in the case of Brazil (14.2%), followed by Taiwan (13%) and Germany (8.2%) until 2006. WHOQOL-bref has been used in several countries and in different groups of people, demonstrating its many possibilities of use in an international and cross-cultural perspective.

Researchers' interest in the concept of quality of life has focused on the debate on the definition and measures of quality of life utilization. It is a short, fast-to-apply instrument that can be used both in populations with some type of disease and in healthy populations.

ETHICAL ASPECTS

The methodological procedures of the present study were prepared in accordance with the fundamental ethical and scientific procedures, as provided for in Resolution No. 466 of December 12, 2012 of the National Health Council of the Ministry of Health. Data collection was performed after the approval of the Research Ethics Committee and the signature of the participants of the informed consent form.

This approval corresponds to opinion number: 6,233,849, where the Research Ethics Committee of Uniara, in accordance with the attributions defined in CNS Resolution No. 466 of 2012, No. 510 of 2016 and Operational Norm No. 001 of 2013 of the CNS, expressed itself in favor of the APPROVAL of the proposed research project.

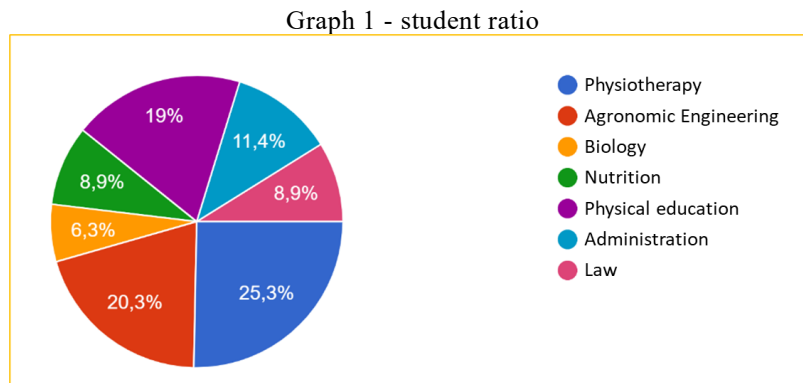
The data obtained are being grouped according to the specificities of the responses. The results will be confronted with the available literature, conclusions will be drawn and a proposal will be made, if a curricular adaptation is necessary, aiming to establish an ethical and

sustainable awareness in relation to a biocentric relationship between man and nature, in the researched courses, serving as a proposal for discussion for the Institution.

RESULTS AND DISCUSSIONS

BLOCK I- SOCIODEMOGRAPHIC DATA

Graph 1 shows the percentage of students in each course who answered the survey questions.



A total of 79 students participated in the research, of which 25.3% corresponded to students of the Physiotherapy course, 20.3% of the Agronomic Engineering course, 19% of the Physical Education course and 8.9% Nutrition, 8.9% Biology, 8.9% Law and 11.4% Administration.

The data collected showed that 50.6% corresponded to the female audience and 69.2% are white.

Students living in Santa Fé do Sul correspond to 50.6% of the students who participated in the survey.

Of the students surveyed, 8.9% have completed higher education, the remaining students are fulfilling their dream of graduating for the first time.

Students aged between 21 and 25 years correspond to 73.1% of the studied public and 16.7% are up to 20 years old.

In relation to work, it can be seen that only 8.9% of the students do not work. The students of this institution are students who study at night and thus work to pay for their studies. Working students account for 55.7%. Some students do internships and have scholarships that help with their studies. In the Institution, being municipal, there are several benefits of internships, such as library assistants, laboratory. In the corridors of the Institution's building, in

the 3 periods there are students assisting teachers, organizing the classrooms, with data shows, microphones, speakers and allowing a better quality of class.

Regarding family income, it can be seen that 40.5% of the students live on 1 to 2 minimum wages, and 39.2% on 3 to 4 minimum wages. The public of the Institution is a public in difficult living conditions. They are students who need to work and help their families, so the scholarships present at the Institution allow them to study.

It can be seen that 88.6% of the studied population is single, living with their parents and helping with the family income, and 64.6% live with 2 or 3 people. According to Table 1:

Table 1 - Sociodemographic characteristics of university students

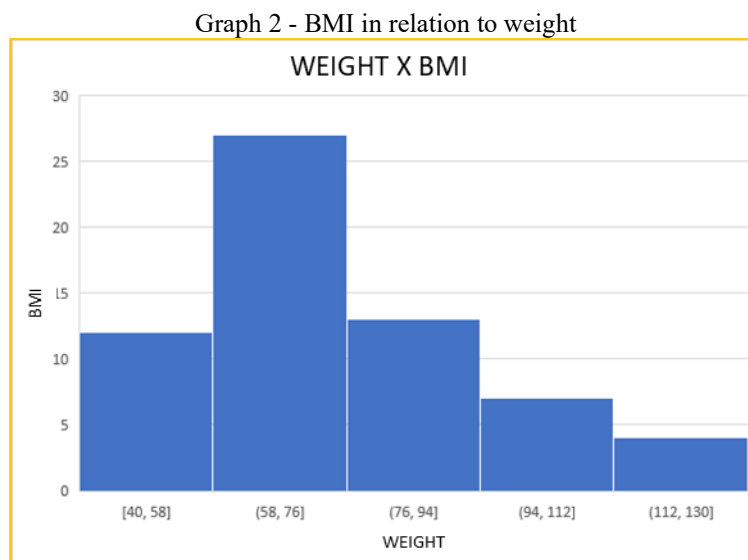
Variables	n	%
Gender		
Female	40	50,6%
Male	39	49,4%
Other	0	0
You don't want to specify	0	0
Age (years)		
Up to 20	13	16,7%
21-25	57	73,1%
26-30	4	5,1%
31-40	3	3,8%
41 more	1	1,3%
Race/color		
white	54	69,2%
yellow	12	15,4%
indigenous	2	2,6%
Black	10	12,8%
Residence		
Other Cities	39	49,4%
Southern Santa Fe	40	50,6%
Educational level		
Full Superior	7	8,9%
Incomplete Superior	71	89,9%
Postgraduate studies	1	1,3%
Occupational status		
Doesn't work	7	8,9%
Works	44	55,7%
Do an internship	28	35,4%
Family Income (minimum wages)		
1-2		
3-4	31	39,2%
5-6	8	10,1%
7-8	4	5,1%
9 above	32	40,5%
Marital status		
single	70	88,6%
married	4	5,1%
Stable union	5	6,3%
divorced	0	0
widower	0	0

N. persons in the residence		
1	4	5,1%
2-3	51	64,6%
4-5	22	27,8%
6	1	1,3%
More than 6	1	1,3%

Source: author own

GENERAL CLINICAL DATA

To analyze the general clinical data, the weight and height of the students were surveyed, and then the BMI was calculated, and Graph 2 showed the relationship between BMI x weight of the students.



In the literature, BMI values follow a general classification according to the WHO, presented in Table 2:

Table 2 - BMI classification according to the WHO

IMC	Classificações
Menor do que 18,5	Abaixo do peso normal
18,5 - 24,9	Peso normal
25,0 - 29,9	Excesso de peso
30,0 - 34,9	Obesidade classe I
35,0 - 39,9	Obesidade classe II
Maior ou igual a 40,0	Obesidade classe III

Classificação segundo a OMS a partir do IMC



Analyzing the graph, it was found that most of the participants had a BMI above 25. This indication shows a classification of overweight or obesity of class I, according to the WHO classification.

In order for our body to perform its functions in the best way, some basic parameters that are related to its composition must be considered, including the amount of water in the body, lean mass, weight and fat percentage. When within an adequate parameter, this percentage is positive for health. But when you go beyond that limit, it's important to understand some concepts. Overweight or obesity refers to the excessive accumulation of body fat.

When obesity is identified, there are some specific classifications of obesity that further unravel the level of the disease.

Grade I obesity (moderate overweight) occurs when the BMI is between 30 to 34.5 kg/m² and grade III obesity is called morbid obesity, being the most severe condition, characterized by BMI above 40 kg/m² and with a more relevant impact on quality of life.

According to the National Institute of Educational Studies and Research Anísio Teixeira (INEP), Brazil has just over 8 million university students.

Elevated body mass index (BMI) may maximize and/or play a secondary role in the occurrence of death from various causes.

Obesity, i.e., overweight estimated by BMI and its repercussions, represent a health risk condition that impacts quality of life, being associated with multiple comorbidities, such as type II diabetes, hypoventilation syndrome, chronic kidney disease, liver disease, cardiovascular risk factors, such as arterial hypertension, dyslipidemia and dysglycemia, and different types of cancer. which may have an influence on life expectancy.

Some factors can contribute to weight gain, including sedentary lifestyle and insufficient physical activity.

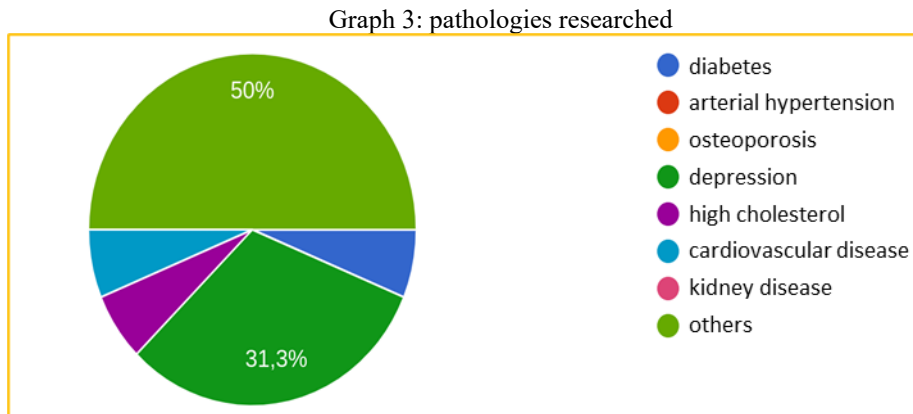
Physical activity guidelines define active activity as the practice of some activity for at least 150 minutes at moderate intensity or 75 minutes at vigorous intensity per week, or the equivalent combination of both intensities.

It is believed that being a university student increases the risks of overweight and obesity, due to changes in habits, such as those related to a diet high in sugar and the consumption of alcoholic beverages.

Other parameters are necessary to assess the health of each person, including biochemical and cardiovascular tests and an anamnesis of the individual as a whole, checking lifestyle, hours of sleep, stress levels and others, being conditions for a more specific clinical picture.

In this study, only one general clinical picture was evaluated through the questionnaire applied, in order to be able to relate it to the quality of life of these university students.

Graph 3 shows which possible pathologies the students have:



The survey also showed that 31.3% of students believe they have depression. 50% of the students have another type of pathology, as well as 6.3% of the students have diabetes, 6.3% have high cholesterol and 6.3% have cardiovascular diseases.

The institution has a psychology clinic where, through interns under the guidance of professors, they offer excellent care. This work is offered to all students of the studied institution and also to the population of the city of Santa Fé do Sul/SP.

In addition to the psychology clinic, the institution also has a nutrition clinic and a specialty center (CEMU) where care is provided to students and the population of Santa Fe do Sul.

These services, psychological, nutritional and in some specialties in the health area, are services provided by students or residents and professors of the institution related to the courses of nutrition, psychology and medicine, where the students of the appropriate courses carry out the internships under the supervision of Unifunec professors.

In addition, campaigns, lectures and round tables are also held by Unifunec, guiding and raising awareness among students to seek help in these sectors.

According to Adewia, 2006 et. About 15% to 25% of university students had some type of psychiatric disorder during their academic training, including depressive and anxiety disorders. In the case of some courses, such as medicine, these internships can lead to suicides. Thus, the institution, concerned with helping students in a humanized way, offers psychiatric services to all students.

An important aspect of this study is to verify this prevalence and to guide students about these services offered.

Changes that are more profound than awareness campaigns are necessary and need to include public policies, adequate funding, qualified training, and listening to those who live with mental disorders. Electing leaders committed to articulating these commitments can be a way out.

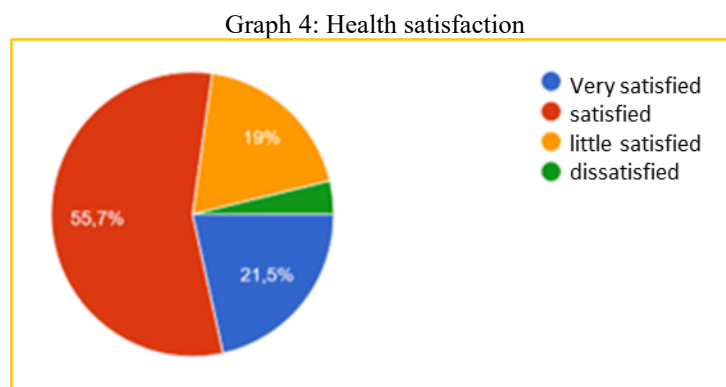
In addition, the media has great potential to contribute to suicide prevention actions and through careful communication can avoid stigmatization, the dissemination of pro-suicide content, as well as a possible contagion effect.

BLOCK II- QUALITY OF LIFE (ACCORDING TO THE ATTACHED QUESTIONNAIRE)

These data were collected based on the Quality of Life Assessment Instrument based on The World Health Organization Quality of Life – WHOQOL-bref.

The data in graph 4 show that 55.7% of the students studied are satisfied with their health and 21.5% consider themselves very satisfied with their health and 19% are somewhat satisfied and 3.8% are dissatisfied with their health.

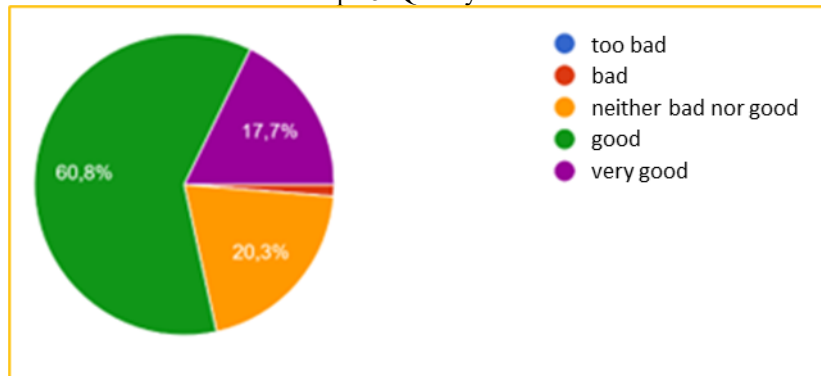
Health is an important index that can be related to students' performance during their studies.



These results may be related to the fact that the students live in small towns, with their parents and their diet helping to improve their health.

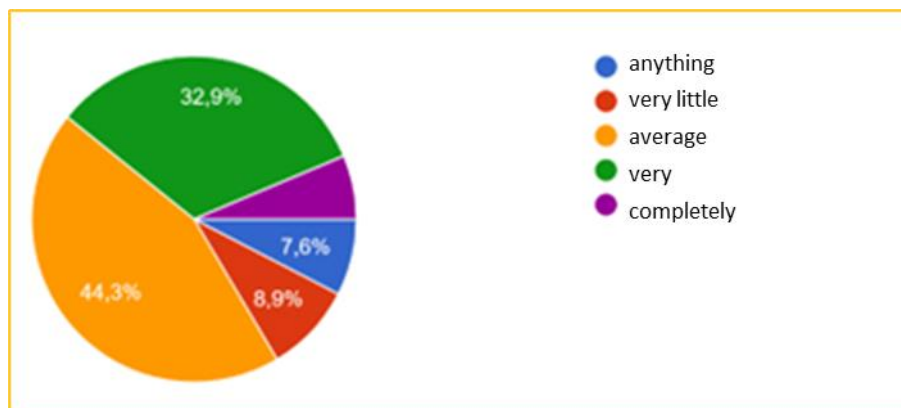
When analyzing graph 5 on quality of life, it can be seen that 60.8% of the students consider their quality of life to be good.

Graph 5: Quality of life



The results on the question: Do you receive the support you need from others? show that 44.3% receive medium support and that 32.9% receive a lot of support. However, 7.6% of the students consider that they do not receive any support, according to graph 6.

This support can be related to family, friends, teachers, doctors, therapists, or other people.



Graph 6: Whether the person receives support

Following the questions of the WHOQOL-bref, the survey showed that 60.3% of students do not have any physical impediment in relation to what they need to do on a daily basis.

It can be seen that 72.2% of the students do not undergo any daily medical treatment, while only 1.3% of them need some type of daily treatment.

27.8% of the students enjoy life very well, and only 10% of those studied consider that they do not enjoy life.

Regarding the meaning of life, it can be seen that 41.8% of the students understand that their lives have great meaning and only 2.5% do not perceive the meaning of their lives.



The students consider themselves to have low concentration for the performance of the activities, only 5.1% believe they have concentration.

Regarding safety, 17.7% of the students feel safe and 35.4% feel a little safe. Regarding noise, climate, pollution, 41.8% of the students answered that the environment has favorable conditions.

When analyzing whether the students have enough energy for their daily lives, it can be seen that 30.4% have a medium energy and that 17.7% have a lot of energy. This estimate shows how capable the student is feeling about doing certain things over the past two weeks.

Regarding self-esteem, 40.5% feel satisfied with their appearance and self-esteem. The other students do not feel satisfied, or are not very satisfied with their physical appearance. Social media has greatly influenced this industry. People post the most beautiful photos in different places, trying to show that they are always beautiful and always happy. This can be one of the factors that cause students to not feel as satisfied with their appearances.

Only 10.1% of students consider that they have enough money to meet their needs. This data shows the difficulty that students have in taking a higher education course. They work during the day, help their families and continue to pursue their dreams.

Students consider that they have the information they need for their daily lives. This fact corresponds to the facilities of the internet and the easy access to the library and in the Institution the presence of a Wi-Fi network available to all students, teachers and staff free of charge.

Regarding leisure, it can be seen from the data that 30.4% consider themselves to have more or less access to leisure. A possible explanation may be related to a lack of time on a daily basis and on the weekend. Some students work on weekends, help their families financially and it is the time they use to do their homework and study.

When analyzing these data on quality of life, it can be seen that medicine has become increasingly concerned, developing pillars for lifestyle studies. Lifestyle medicine is based on 6 fundamental pillars: diet, physical activity, sleep, control of toxic substances (smoking and alcoholism), stress and maintenance of relationships. This modality in medicine emerged in the United States and addresses the prevention and treatment of diseases, already in Brazil it was installed in 2018, with the Brazilian College of **Lifestyle Medicine**. The term quality of life encompasses a series of factors, which are directly related to a person's living conditions, such as general health, family relationships, work-life balance, fulfillment of dreams and personal goals, among others. This leads us to adopt healthy habits so that we can maintain a balanced life in all areas.



Research conducted with students in large cities has found that students face varying levels of stress: tight deadlines, demands, evaluations, and the uncertainty of the future cause anxiety, sleepless nights, and often mental disorders.

Each person faces the entrance to the University Life in its own way, having particular facilities and also specific difficulties. Those who are more diligent in their studies may feel uncomfortable interacting socially, while those who are more sociable may have little ability to concentrate or focus, for example. The results indicate that it is necessary to think about prevention and health promotion actions and an expansion of the student care policy, with psychosocial interventions that satisfactorily reflect on their subjective well-being and quality of life.

Entering university is marked by an impact that goes beyond professionalization, implying a series of transformations in social support networks. Students meet and live with new people, they include themselves in innovative contexts. On the other hand, when bonds of friendship are not established, students can rely only on their own psychological resources and the support of networks formed prior to entering the university, which may be distant. Many young people, when seeking a higher education, leave their hometowns and start living far from their families, a factor that can also interfere with their adaptation to the reality of professional training.

The permanence and completion of the university course are characteristics that deserve to be highlighted, since they require an intense process of student involvement in their training. University students are expected to have autonomy in learning, time management, and the definition of goals and strategies for their studies. In addition, in addition to classes, internships, and term papers, there is concern about post-graduation life, which can generate anxiety and insecurity.

Paying attention to the dimensions that permeate the singularity and multidimensionality of the academic daily life is necessary in current times, and it is pertinent to study the quality of life of higher education students. In addition, new challenges and changes during the training process are highlighted: choice of profession, academic transition, new requirements and time management. In higher education, students are encouraged to be autonomous in their education, starting to seek content and teaching in curricular and extracurricular activities. The students evidenced changes in the requirements of studies, such as the amount of content and the different subjects of higher education when compared to high school.



The difficulty in keeping up with such demands and exercising autonomy, associated with other factors such as dissatisfaction and lack of identification with the chosen course and unattractive teaching practices, can lead to a lack of interest and motivation. experiences, personal characteristics and social roles. Such diversity, in order to be accommodated effectively, requires the student's ability in interpersonal/social relationships. These researches can generate new knowledge, raise questions and contribute to decision-making that actually improves people's quality of life.

It can be seen that students in the final year suffer the impact of the end of the course due to the transitions that the entrance to the university produces. Thus, it is necessary for university students to be able to have a support and care network that guarantees adequate professional training and promotion of their health, enhancing their quality of life.

Finally Quality of life according to the WHO is the individual's perception of his/her insertion in life, in the cultural context and value system in which he/she lives, as well as his/her goals, expectations, standards and concerns. This concept involves physical, emotional, psychological, and mental well-being.



REFERENCES

- Araújo, D. S. M. S., & Araújo, C. G. S. (2000). Aptidão física, saúde e qualidade de vida relacionada à saúde em adultos. **Revista Brasileira de Medicina do Esporte**, 6, 194-203.
- Azevedo, E. de. (2014). Alimentação saudável: uma construção histórica. **Revista Simbiótica**, (7), 83-111.
- Barbieri, J. C. (2007). **Gestão ambiental empresarial** (2ª ed.). São Paulo: Saraiva.
- Bedford, J. L., & Barr, S. I. (2005). Diets and selected lifestyle practices of self-defined adult vegetarians from a population-based sample suggest they are more “health conscious”. **International Journal of Behavioral Nutrition and Physical Activity**, 2(1), 4.
- Canella, D. S., Louzada, M. L. D. C., Claro, R. M., Costa, J. C., Bandoni, D. H., Levy, R. B., & Martins, A. P. B. (2018). Consumo de hortaliças e sua relação com os alimentos ultraprocessados no Brasil. **Revista de Saúde Pública**, 52, 50.
- Collet, C., et al. (2008). Fatores determinantes para a realização de atividades físicas em parques urbanos de Florianópolis. **Revista Brasileira de Atividade Física & Saúde**, 13(1).
- Da Silva Pereira, M. L., & De Oliveira Barbosa, M. L. (2020). Ensino e Educação Especial: análise bibliométrica e metassíntese qualitativa da produção científica indexada na base Web of Science. **Revista Educação Especial**, 33, 1-32.
- Dias, I. S., et al. (2021). Qualidade de vida de estudantes do Ensino Superior (Leiria/Portugal). **Revista Brasileira de Prescrição e Fisiologia do Exercício**, 14(91), 416-422.
- Fernanda do Nascimento Jacinto de Souza, B., Serenini Bernardes, M., Cristina Ribeiro Vieira, V., Maria Stolse Bergamo Francisco, P., Marín-León, L., Flaviane Mendes Camargo, D., & Segall-Corrêa, A. M. (2022). (In)segurança alimentar no Brasil no pré e pós pandemia da COVID-19: reflexões e perspectivas. Disponível em: <https://iajmh.emnuvens.com.br/iajmh/article/view/160>. Acesso em: 7 out. 2022.
- Fernandes, H. M. (2018). Atividade física e saúde mental em adolescentes: O efeito mediador da autoestima e da satisfação corporal. **Revista de Psicologia del Deporte**, 27(1), 67-76.
- Lanzillotti, H., Barros, M., Jesus, L., Marchitto, R., Portella, E., & Soares, E. (2019). Estimativa do padrão alimentar de estudantes de nutrição de uma universidade estadual do Rio de Janeiro, Brasil. **DEMETRA: Alimentação, Nutrição & Saúde**, 14.
- Matsudo, S., et al. (2001). Questionário internacional de atividade física (IPAQ): estudo de validade e reprodutibilidade no Brasil. **Revista Brasileira de Atividade Física & Saúde**, 5-18.
- Meurer, S. T., Borges, L. J., Benedite, T. R. B., & Mazo, G. Z. (2012). Associação entre sintomas depressivos, motivação e autoestima de idosos praticantes de exercícios físicos. **Revista Brasileira de Ciências do Esporte**, 34(3).



- Miller, T. C., & Furnival, A. C. M. (2022). A ciência da Nutrição no “Novo Regime Climático”. *Liinc Em Revista*, 18(1). <https://doi.org/10.18617/liinc.v18i1.594>
- Minayo, M. C. S., Hartz, Z. M. A., & Buss, P. M. (2000). Qualidade de vida e saúde: um debate necessário. *Ciência & Saúde Coletiva*, 7(15), 7-18.
- Organização Mundial de Saúde (OMS). (1998). Obesity: preventing and managing the global epidemic. Report of a WHO consultation, Geneva, 3-5 Jun 1997. Geneva: World Health Organization. (WHO/NUT/98.1).
- Organização Internacional de Universidades pelo Desenvolvimento Sustentável e Meio Ambiente (OIUDSMA). (2002). Recuperado em 11 de agosto de 2005, de <http://www.ugr.es/~oiudsma/Welcome.html>
- Oliveira, D., et al. (2019). Depressão, autoestima e motivação de idosos para a prática de exercícios físicos. *Psicologia, Saúde & Doenças*, 20(3), 803-812.
- Pala, W. (2020). Estudo sobre elementos da felicidade interna bruta (FIB) junto aos acadêmicos do curso de comércio internacional da UCS Carvi. Trabalho de conclusão de curso de graduação apresentado ao Curso de Comércio Internacional da Universidade de Caxias do Sul, como requisito parcial para a obtenção do grau de Bacharel em Comércio Internacional.
- Programa das Nações Unidas para o Desenvolvimento (PNUD). (1990). Relatório de desenvolvimento humano 1990: conceito e medida do desenvolvimento humano. Lisboa: Tricontinental.
- Rezende, E. T., et al. (2015). Ingestão proteica e necessidades nutricionais de universitários vegetarianos. *Revista de Atenção à Saúde*, 13(44), 52-57.
- Rôla, C. V. S., et al. (2018). Instrumentos de avaliação da qualidade de vida de pessoas jovens e idosas: um estudo de revisão sistemática. *ID on Line Revista de Psicologia*, 12(42), 111-120.
- Ross, M. (1973). Suicide among physicians: a psychological study. *Disease of the Nervous System*, 31, 145-150.
- Rubio, K. (2010). Medalhistas olímpicos brasileiros: memórias, histórias e imaginário. São Paulo: Casa do Psicólogo/FAPESP. Disponível em: <https://scielosp.org/article/csc/2010.v15n1/115-120/>. Acesso em: 8 out. 2022.
- Sales, G. P., & Ferreira, T. F. (2011). Aplicação do questionário "Whoqol-Bref" para avaliação da qualidade de vida nos participantes do projeto de promoção em saúde corra pela vida de São Roque do Canaã/ES. *Revista Brasileira de Prescrição e Fisiologia do Exercício (RBPFE)*, 5(28), 9.
- Sanchez, H. M., et al. (2019). Impacto da saúde na qualidade de vida e trabalho de docentes universitários de diferentes áreas de conhecimento. *Ciência & Saúde Coletiva*, 24, 4111-4123.



Sichieri, R., Castro, J. F. G., & Moura, A. S. (2003). Fatores associados ao padrão de consumo alimentar da população brasileira urbana. *Cadernos de Saúde Pública*.

Silva, E. A. P. C., Silva, P. P. C., Santos, A. R. M., Cartaxo, H. G. O., Rechia, S., & Freitas, C. M. S. M. (2013). Espaços públicos de lazer na promoção da qualidade de vida: uma revisão integrativa. *LICERE - Revista do Programa de Pós-graduação Interdisciplinar em Estudos do Lazer*, 16(2), 1-18. Disponível em:
<https://seer.ufmg.br/index.php/licere/article/view/372/267>

Tremea, E., et al. (2019). Carne vermelha e seus derivados. *Simpósio em Saúde e Alimentação*, 3.

Viana, A. G., & Sampaio, L. (2019). Qualidade de vida dos universitários em período de conclusão de curso. *ID on Line Revista Multidisciplinar de Psicologia*, 13(47), 1085-1096.

WHOQOL Group. (1998). Development of World Health Organization WHOQOL-BREF Quality of Life Assessment. *Psychological Medicine*, 28, 551-558.



ATTACHMENTS

Block I - Questionnaire: sociodemographic survey and general practitioners

1-License plate number:

2- Course you attend:

- Administration
- Agronomic Engineering
- Biology
- Physical Education
- Physiotherapy
- Law
- Nutrition

3-Gender: Male Female Other (please specify)..... you do not want to specify

4-Race/color (from IBGE categories)

- yellow
- white
- indigenous
- black

5- Place of residence:

- South Santa Fe
- another city, which.....

6- Current level of education: complete higher education incomplete higher education post-graduation

7-Do you already have a higher education degree?

- Yes, which course:.....
- no

8- Age Group:

- up to 20 years
- between 21 and 25 years old
- between 26 and 30 years old
- between 31 and 40 years old
- 41 years of age or older

9- What is your current occupational situation?

- does not work
- work, in which occupation -----
- does an internship

10- Monthly family income:

- 1 to 2 minimum wages
- 3 to 4 minimum wages
- 5 to 6 minimum wages



- 7 to 8 minimum wages
- 9 minimum wages or more

11- Estado civil:

- single common-law union married divorced widower

12- Number of people living in your residence:

- 1
- 2-3
- 4-5
- 5-6
- more than 6

13- Height:

Current Weight:

14- Tick the alternative(s) if you have:

- diabetes high blood pressure osteoporosis depression high cholesterol
- cardiovascular disease kidney disease other(please specify)

Source: developed by the author and advisors

Block II- Quality of life

Quality of Life Assessment Instrument (Fleck, 2000, 2003) The World Health Organization Quality of Life – WHOQOL-bref Instructions

This quiz is about how you feel about your quality of life, health, and other areas of your life. Please answer all questions. If you are unsure about what answer to give to a question, please choose from the alternatives that seem most appropriate to you. This can often be your first choice. Please keep in mind your values, aspirations, pleasures, and concerns. We're asking you what you think of your life, taking the last two weeks as a reference.

For example, thinking back over the past two weeks, how do you answer these questions?

		nothi ng	Very little	mediu m	Very much	completely
Do you get the support you need from others?		1	2	3	4	5
		Very bad	Bad	Neither bad nor good	good	Very good
1	How would you rate your quality of life?	1	2	3	4	5
		Very dissatisfied	Unsatisfied	Neither satisfied nor dissatisfied	satisfied	Very satisfied
2	How satisfied are you with your health?	1	2	3	4	5
		nothi ng	Very little	More or less	pretty much	extremely



3	To what extent do you think your (physical) pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to lead your daily life?	1	2	3	4	5
5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you think your life has meaning?	1	2	3	4	5
7	How much can you concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment (climate, noise, pollution, attractions)?	1	2	3	4	5
		nothing	Very little	medium	Very much	completely
10	Do you have enough energy for your day-to-day life?	1	2	3	4	5
11	Are you able to accept your physical appearance?	1	2	3	4	5
12	Do you have enough money to satisfy your needs?	1	2	3	4	5
13	How available to you is the information you need in your day-to-day life?	1	2	3	4	5
14	To what extent do you have opportunities for leisure activity?	1	2	3	4	5
		Very bad	spacious	Germany Ruimnem Bom	good	Very good
15	How well are you able to get around?	1	2	3	4	5
		Very dissatisfied	Unsatisfied	Neither satisfied nor dissatisfied	satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your day-to-day activities?	1	2	3	4	5
18	How satisfied are you with your ability to work?	1	2	3	4	5
19	How satisfied are you with yourself?	1	2	3	4	5
20	How satisfied are you with your personal relationships (friends, relatives, acquaintances, colleagues)?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you receive from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of the place where you live?	1	2	3	4	5
24	How satisfied are you with your access to health services?	1	2	3	4	5
25	How satisfied are you with your mode of transportation?	1	2	3	4	5



The next question relates to **how often** you have felt or experienced certain things in the past two weeks.

		never	Sometimes	frequently	Very often	All the time
26	How often do you have negative feelings such as moodiness, despair, anxiety, depression?	1	2	3	4	5