Revista Facultad Nacional de Salud Pública
ISSN: 0120-386X
ISSN: 2256-3334
Universidad de Antioquia

Burgos-Dávila, Delia; Medina-Zapata, Heidy; Potes-Morales, Lina Yurany
Perspective of the university community about the constitutive elements of a Healthy University at Universidad del Valle (Colombia)
Revista Facultad Nacional de Salud Pública, vol. 41, no. 3, e07, 2023, September-December
Universidad de Antioquia

DOI: https://doi.org/10.17533/udea.rfnsp.e352189

Available in: https://www.redalyc.org/articulo.oa?id=12076139007

Perspective of the university community about the constitutive elements of a Healthy University at Universidad del Valle (Colombia)

Elementos constitutivos de una universidad saludable: Una Perspectiva de la comunidad de la Universidad del Valle

Elementos constitutivos de uma universidade saudável: Uma Perspectiva da comunidade da Universidade del Valle

Delia Burgos Dávila[1]; Heidy Medina Zapata[2]; Lina Yurany Potes Morales[3]

[1] Nurse, Master's degree in Psychotherapy. Universidad del Valle. Cali, Colombia. E-mail: delia.burgos@correounivalle.edu.co. ORCID: https://orcid.org/0000-0002-4373-6427

[2] Nurse, Master's degree in Epidemiology. Universidad del Valle. Cali, Colombia. E-mail: heidy.medina@correounivalle.edu.co. ORCID: https://orcid.org/0000-0002-7638-777X

[3] Nurse, Master's degree in Public Health. Universidad del Valle. Cali, Colombia. E-mail: lina.potes@correounivalle.edu.co. ORCID: https://orcid.org/0000-0001-5366-2591

Recibido:25/01/2023. Aprobado: 25/07/2023. Publicado: 25/08/2023

Burgos D, Medina H, Potes LY. Perspective of the university community about the constitutive elements of a Healthy University at Universidad del Valle (Colombia). 2023;41(3):e352189. DOI: https://doi.org/10.17533/udea.rfnsp.e352189

Abstract

Objective: A Health Promoting University seeks to encourage a culture of health care, quality of life, and well-being in its community. This study analyzes the perspective of the university community on concepts related to a Healthy University. **Methodology:** An exploratory cross-sectional study was conducted at Universidad del Valle, a public university located in Cali, Valle del Cauca, in the Southwest of Colombia. In March and May 2021, the survey "Concepts of health, Health Promoting University and constituent elements for the formulation of an institutional policy of Healthy University" was applied. The target population was the university community, involving professors, students, and university administration. For the data analysis, the technique of segmentation by two-stage cluster and the study of main components were used. **Results:** The total number of participants was 1435, with a median age of 29 years. Most participants chose the meaning of health as "Eating healthy and balanced" and "Feeling good about the person you are, most of the time." The concept selected for Health Promoting University was "one that works for a culture of health care through social and environmental interventions aimed at improving the quality of life." On the other hand, "Quality, Inclusive and Equitable Education" was chosen as a fundamental constitutive element of a Health Promoting University policy. **Conclusions:** It was observed that, regarding lifestyles, participants' mindsets shifted from

traditional health biologistic imaginaries to integral health concepts, giving notable prevalence to mental health. Our results showed the perspective of the university community members, including the differences between the students, professors, and administrators regarding concepts related to a Health Promoting University.
----------*Keywords:* Health, Health-Related Behavior, Health Promotion, Mental Health, Universities.

Resumen

Objetivo: Una universidad que promueve la salud busca fomentar una cultura del cuidado de la misma, de su calidad de vida y del bienestar en su comunidad. Este estudio analiza la perspectiva de la comunidad universitaria en torno a conceptos relacionados con una universidad saludable. **Metodología:** Se realizó un estudio exploratorio de tipo transversal en la Universidad del Valle, universidad pública ubicada en Cali, Valle del Cauca, al suroccidente de Colombia. En marzo y mayo de 2021 se realizó la encuesta "Conceptos de salud y elementos constitutivos para la formulación de una política institucional universitaria promotora de salud". La población objetivo fue la comunidad universitaria, integrada por profesores, estudiantes y personal administrativo. Para el análisis de los datos se utilizó la técnica de segmentación por conglomerados en dos etapas y el estudio de los componentes principales. **Resultados:** El número total de participantes fue de 1435, con edad media de 29 años. La mayoría de los participantes escogieron el significado de salud en función de "comer sano y equilibrado" y "sentirse bien con uno mismo la mayor parte del tiempo". El concepto seleccionado para definir una universidad promotora de la salud fue "aquella que trabaja por una cultura del cuidado de la salud mediante intervenciones sociales y medioambientales dirigidas a mejorar la calidad de vida". Por otra parte, se escogió "una educación de calidad, inclusiva y equitativa" como elemento constitutivo fundamental de una política universitaria promotora de la salud. **Conclusiones:** Se observó que la perspectiva de los participantes pasó de enforcarse en los imaginarios biologistas de la salud tradicional hacia conceptos de salud integral, dando relevancia notable a la salud mental, lo cual es consistente con los postulados de la OMS y su plan de acción en temas de salud mental para 2013-2030.
----------*Palabras clave:* salud, promoción de la salud, conductas saludables, salud mental, universidades

Resumo

Objetivo: Uma universidade que promove a saúde procura incentivar uma cultura do seu cuidado, da qualidade de vida e do bem-estar em sua comunidade. Este estudo analisa a perspectiva da comunidade universitária ao redor de conceitos relacionados com uma universidade saudável. **Metodologia:** Realizou-se um estudo exploratório de tipo transversal na Universidade del Valle, universidade pública localizada em Cali, Valle del Cauca, no sudoeste da Colômbia. Em março e maio de 2021 realizou-se a enquete “Conceptos de salud y elementos constitutivos para la formulación de uma política institucional universitaria promotora de salud”. A população-alvo foi a comunidade universitária, composta por professores, estudantes e pessoal administrativo. Para a análise dos dados utilizou-se a técnica de segmentação por conglomerados em duas etapas e o estudo dos componentes principais. **Resultados:** O número total de participantes foi de 1435, com idade média de 29 anos. A maioria dos participantes escolheram o significado de saúde em função da “alimentação saudável e equilibrada” e de “sentir-se bem consigo mesmo a maior parte do tempo”. O conceito selecionado para definir uma universidade promotora da saúde foi “aquela que trabalha por uma cultura do cuidado da saúde por meio de intervenções sociais e do meio-ambiente encaminhadas a melhorar a qualidade de vida”. Por outra parte, escolheu-se “uma educação de qualidade, inclusiva e equitativa” como elemento constitutivo fundamental de uma políticas universitária promotora da saúde. Conclusões: Observou-se que a perspectiva dos participantes passou de se focar nos imaginários biologistas da saúde tradicional para os conceitos de saúde integral, dando relevância notável à saúde mental, o que está em concordância com os postulados da OMS e seu plano de ação em temas de saúde mental para 2013-2030.
---------*Palavras-chave:* saúde, promoção da saúde, condutas saudáveis, saúde mental, universidades.

Introduction

Healthy Universities are higher education institutions that foster the values and principles of the Global Health Promotion movement within their organizational culture [1]. In 2014, Universidad del Valle took on the challenge of projecting itself to 2025 as a health-promoting university with the support of the University Welfare Office. The institution opened spaces to recognize and legitimize this vital initiative by creating the "Healthy University program" in the Strategic Development Plan 2015-2025 [2]. This program develops the institutional policy of a Health Promoting University under a collective effort focused on co-responsibility —promoting a culture of health, human development, and improving the quality of life through strategies and lines of action [3]. Health Promoting Universities are those that are administratively and politically committed to positioning Health Promotion as an integrating element of the university's vision, mission, values and strategic plan. These contribute to the protection and maintenance of health, to the strengthening of healthy environments and contribute to the achievement of the sustainable development objectives (SDG). In the same way, these institutions influence the improvement of the quality of life of the university community.

Universidad del Valle and the Health Promoting University program establish their institutional policy formulation process on Baena's public policy model [4] which includes the following phases: I. Agenda setting, II. Public Agenda, III. Policy formulation, IV. Implementation, V. Follow-up, and VI. Evaluation. The current policy is in the phase of the public agenda. It has been developed, in a dialogical and participatory way, through public consultations with the different social actors to guarantee the representation of the university community members.

In this study -articulated to phase II- we aimed to analyze the university community's perspective on the concepts of Health, Health Promoting University, and constituent elements related to a Healthy University through an online survey addressed to professors, students, and administrators.

Methodology

Type of study and population

This research is an exploratory cross-sectional study, applying a previously validated instrument with questions about the constituent elements of a Health Promoting University institutional policy. The place of study was the Universidad del Valle, one of the most important public universities in Colombia. This institution is formed by eleven university branch campuses -including Cali-Meléndez, Cali-San Fernando, Palmira, Pacífico, Buga, Tuluá, Cartago, Norte del Cauca, Zarzal, Caicedonia, and Yumbo-. All of them were considered in the survey through the *LimeSurvey* platform between March and May 2021.

Inclusion and exclusion criteria

The survey was addressed to the entire university community; the inclusion criteria incorporate all the active students, professors, and university administrators-associated with the university for at least six months at the time of being surveyed-. Graduates and retirees of the Higher Education institution were excluded.

Sample size

The participants of this study were selected through a non-probabilistic sampling, considering that the distribution of the population of the Universidad del Valle is made up of 30 054 students (86%) and 3283 professors (9%), and 1624 administrators (5%). At each university site, a sample of these three groups was taken to ensure representativeness and sufficiency until the minimum size was completed.

Survey

The survey "Health concepts and constituent elements for the formulation of a Health Promoting University institutional policy" was built through a literature review and documentary analysis considering the referential framework of the SDG of health and well-being and quality education [5]. Its development was carried out in working groups with a multidisciplinary team of experts in the areas of sociology, economics, mathematics, medicine, and nursing, with a Master or PhD degree. It was designed on the *LimeSurvey* platform and was composed of three parts (https://matusdd.univalle.edu.co/limesurvey/index.php/425761). The first part focuses on the concept of health, the second on the idea of a healthy university, and the third on the elements necessary for creating the institutional policy. Each section was attributed between 16 and 18 statements for participants to rank according to the order of perceived importance. These statements arose from a previous documentary analysis on formulating a Health Promoting University institutional policy. The options for each question were shown in a randomized way (Supplementary material 1).

Implementation of the instrument

The data was obtained through a single step by applying the online survey available on a *LimeSurvey* web platform called MATUSDD. When clicking on the link, the informed consent was displayed, whose acceptance was a mandatory requirement to continue

with the process. The completion time of the survey was estimated to be from ten to fifteen minutes.

To facilitate the participation of the university community, the survey was available every day until the total required sample was reached. The researchers were available to respond to concerns via email or telephone.

Data management

The survey's platform was programmed to store the responses automatically. And then export them to a spreadsheet for analysis. To verify the quality of the information and possible inconsistencies in the database, the researchers and, mainly, the experts who managed the platforms carried out an exploratory analysis, initially randomly selecting 10% of the records to confirm that there was no lack of data from any of the variables evaluated.

Statistical analysis

A univariate analysis was performed to describe the sociodemographic characteristics such as age, gender, faculty, University community group, and University branch campus. Quantitative variables were summarized using measures of central tendency and dispersion. Qualitative variables were presented as percentages in a frequency table.

Segmentation analysis

A segmentation analysis was conducted using the two-stage segmentation method to identify groups with certain demographic variables and similar perceptions of the concepts evaluated [6]. In this way, advanced strategies focused on the specified groups. This method was chosen because the database contained numerical and categorical variables. For this analysis, the Silhouette measure of cohesion and separation was used as an indicator of the quality of the segmentation. A data preparation process was carried out, which included an exploratory analysis and pre-processing to clean, select and transform some variables. Once the previous steps were carried out, the segmentation with the input variables was applied. Considering that a low quality was initially found, the variables with the greatest weight were identified (according to the predictor importance graph) and the algorithm was executed again, including said variables, obtaining a good quality indicator. After this, the main variables of the study corresponding to the definitions of health, healthy universities and the constitutive elements were incorporated to obtain a segmentation that combined the numerical and demographic variables. Finally, the algorithm was iterated with different numbers of segments until a segmentation was found that, from the point of view of the objectives of the study and the demographic review, was useful.

Principal Component Analysis

An analysis of the main components was led to identify the perception of the university community at its various hierarchies regarding the concepts evaluated through the survey [7]. The variables analyzed with this technique were the responses received by the participants concerning the concept of health, the responses received by each university community group about the concept of a Healthy University, and the responses received about the constituent elements for Health Promoting University Institutional policy. This analysis allows the visual representation of the relationships between the variables that are describing the participants based on the decrease in the dimensionality of the problem.

Ethical principles

This study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. The university's Ethics committee authorized this study under internal code No. 111-020 (June 19, 2020). Consent was obtained from all participants.

Results

Sociodemographic characteristics

The total number of participants was 1435, with 378 belonging to the Professors group, 770 students, and 287 to the university staff. The median age was 29 years [21-47] (see Table 1). In addition, cisgender women had the highest participation in the survey, with 58,05%. The university branch campuses that participated the most were in Cali (Meléndez and San Fernando).

The faculties with the highest participation were Engineering, Business Administration, and Humanities, representing 60,30% of the respondents. In addition, it is noteworthy that the Professors group has majority participation of cisgender men, and 92,20% have postgraduate studies. After analyzing data from the university administration group, it was found that it primarily involves women with high educational levels who mostly run administrative activities with long-term contracts.

Segmentation analysis

We obtained six segments whose main characteristics are described in Table 2.

Analysis of main components

Concept of health

For the three university community groups evaluated, the statements prioritized when asking about the concept of health were: «Eating in a healthy and balanced way» and

Table 1. Characterization of survey participants

	n	%
Age, years (Median[IQR])	29 [21-47]	
Cisgender* women	833	58,05
Cisgender* men	578	40,28
Non-binary	5	0,35
Other**	10	0,69
No response	9	0,63
University Branch Campuses		
Cali-Ciudadela Meléndez	750	52,26
Cali-San Fernando	205	14,29
Palmira	86	5,99
Pacífico	73	5,09
Buga	70	4,88
Tuluá	58	4,04
Norte del Cauca	56	3,90
Zarzal	45	3,14
Yumbo	43	2.99
Cartago	27	1,88
Caicedonia	22	1,53
University Community		
Students		
Age, years (Median[IQR])	21 [19-24]	
Cisgender* women	486	63,11
Cisgender* men	269	34,94
Non-binary	3	0,39
Other**	7	0,91
No response	5	0,65
Professors		
Age, years (Median[IQR])	51,5 [41-59]	
Cisgender* women	145	38,36
Cisgender* men	226	59,79
Non-binary	2	0,53
Other**	2	0,53
No response	3	0,79
University administration		
Age, years (Median[IQR])	45 [37-52]	
Cisgender* women	202	70,38
Cisgender* men	83	28,92
Non-binary	0	0,00
Other**	1	0,35
No response	1	0,35

* A cisgender person is one who identifies with the gender they were assigned at birth.; **Includes people who identify as trans women, agender, gender fluid/queer, or other.

IQR: Interquartile range

Table 2. Segment analysis

Segment	Concept		
	Health	Healthy University	Constituent elements for the healthy university policy
1. University administrators with an average age of 44 years with undergraduate or post-graduate studies.	-Eat in a healthy and balanced way.	- An institution that works for a health care culture through social and environmental interventions to improve the university community member's quality of life.	-Quality education that is inclusive and equitable.
2. Students with an average age of 24 years old who belong to the Science and Engineering faculties	- Eat in a healthy and balanced way.	- An institution that works for a health care culture through social and environmental interventions to improve the university community member's quality of life.	-Quality education that is inclusive and equitable.
3. Students with an average age of 25 who belong to the Arts, Humanities, and Engineering faculties.	- Feeling good about the person you are, most of the time	- Institution that promotes the development of knowledge, skills, and abilities that create awareness for self-care and management of one's well-being.	-Quality education that is inclusive and equitable.
4. Ph.D. professors with an average age of 49 years old who belong to the Science, Engineering, and Health faculties.	- Eat in a healthy and balanced way	- An institution that works for a health care culture through social and environmental interventions to improve the university community member's quality of life.	- Healthy and nutritious food, recreation, and sport.
5. Ph.D. professors with an average age of 51 who belong to Humanities, Sciences, and Engineering faculties.	- Feeling good about the person you are, most of the time	- Institution that works for a culture of health care through social and environmental interventions aimed at improving the quality of life of the university community	- Well-being, quality of university life, and health education
6. Professors mainly with specialization or master's degree with an average age of 50 years who belong to Health and Business faculties.	- Feeling good about the person you are, most of the time	- Institution that works for a culture of health care through social and environmental interventions aimed at improving the quality of life of the university community	-Quality, inclusive, and equitable education

«Feeling good about the person you are, most of the time.» In contrast, the least prioritized were: «Be in contact with others; express feelings and emotions to those around you» and «Perform individual and collective actions that favor the care of the environment.» Depending on the group to which the participant belonged, a variation was found, as shown in Figure 1.

Health Promoting University concept

In general, it was observed that the statements prioritized concerning the concept of a Health Promoting University were: "An institution that works for a health care culture through social and environmental interventions aimed at improving the quality of life of the university community members"; and "Institution that promotes the development of knowledge, skills, and abilities that generate awareness for self-care and management of one's well-being." The least prioritized were "Institution that strengthens the culture of cooperation and union for the achievement of objectives for the well-being of the university community" and "Institution that strengthens the social fabric and creates conditions of development, healthy coexistence and respect." However, variation was found in the responses chosen between each level, as shown in Figure 2.

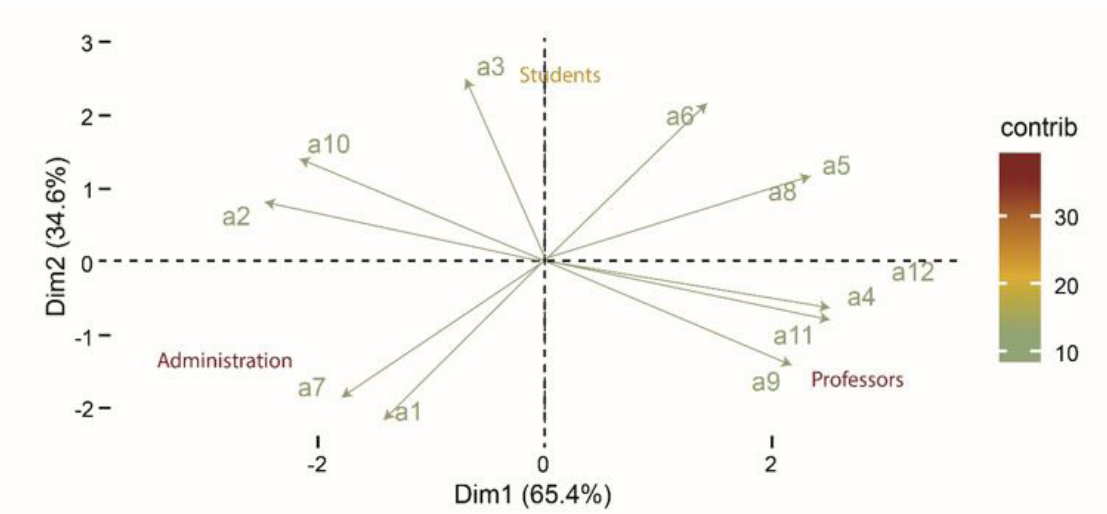

Figure 1. Analysis of the main components of the responses received by students, professors, and administrators about the concept of health. a1: "Eat healthy and balanced" a2: "To go to the medical service at least once a year", a3: "Caring for and ensuring a healthy and sustainable environment", a4: "Enjoy green, well-oxygenated, quiet, and clean environments", a5: "Managing emotions in the face of the constant changes offered by the physical, social and political environment", a6: "Conducting individual and collective actions that favor the care of the environment", a7: "Perform physical activity, at least 150 minutes a week", a8: "Relate, express feelings and emotions with those around you", a9: "Respecting the individuality and integrity of others to favor a healthy coexistence", a10: "Resolve one's own conflicts through dialogue", a11: "Feeling good with the person you are, most of the time", a12: "Be supportive or humanitarian with those around you".

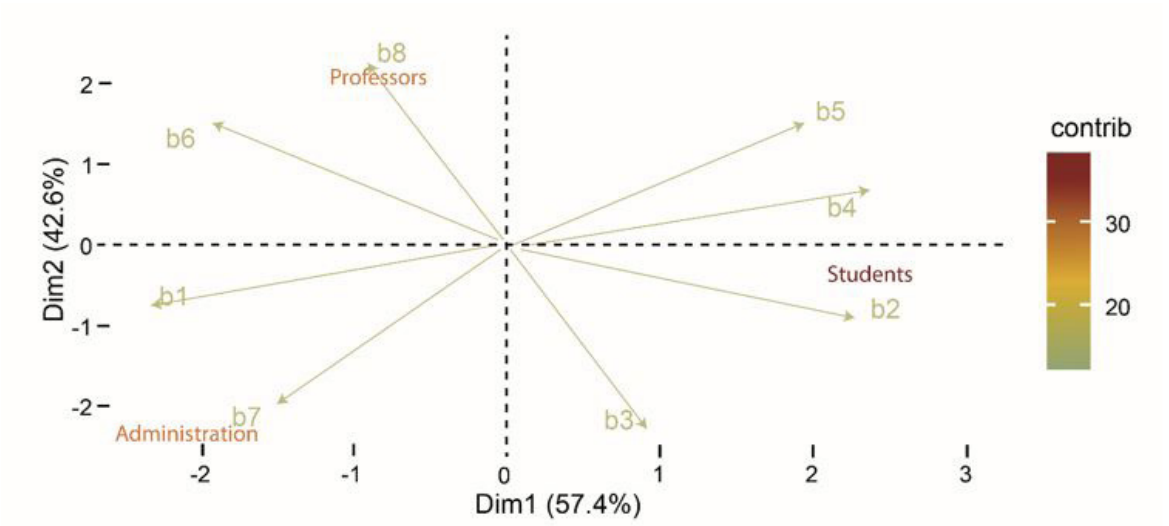

Figure 2. Analysis of the main components of the responses received by each university community group about the concept of a Healthy University. b1: "An institution that works for a culture of health care through social and environmental interventions aimed at improving the quality of life of the university community", b2: "Institution that promotes the development of knowledge, skills, and abilities that generate awareness for self-care and management of one's well-being", b4: "Institution that contemplates promoting health in a transversal way in the various academic programs, courses, and practice spaces. It contributes to the integral formation of students", b5: "An institution that strengthens the culture of cooperation and union to achieve objectives for the well-being of the university community", b6: "Institution that promotes actions that promote and reinforce health from the articulation of the different university actors", b7: "An institution that favors the realization of creative and innovative strategies in their environments; in favor of improving the quality of life of the university community members", b8: "Institution that strengthens the social fabric and creates conditions of development, healthy coexistence, and respect".

Constituent elements

As for the essential constituent elements of a Health Promoting University institutional policy, the statements preferred by the participants were "Quality Education, Inclusive and Equitable" and "Well-being, quality of university life and health education" On the other hand, the least prioritized options were "Investment in clean energy sources" and "Intra-institutional and extra-sectoral articulation that guarantees the fulfillment of development objectives"; however, there were differences between the preferred options between the groups, as shown in Figure 3.

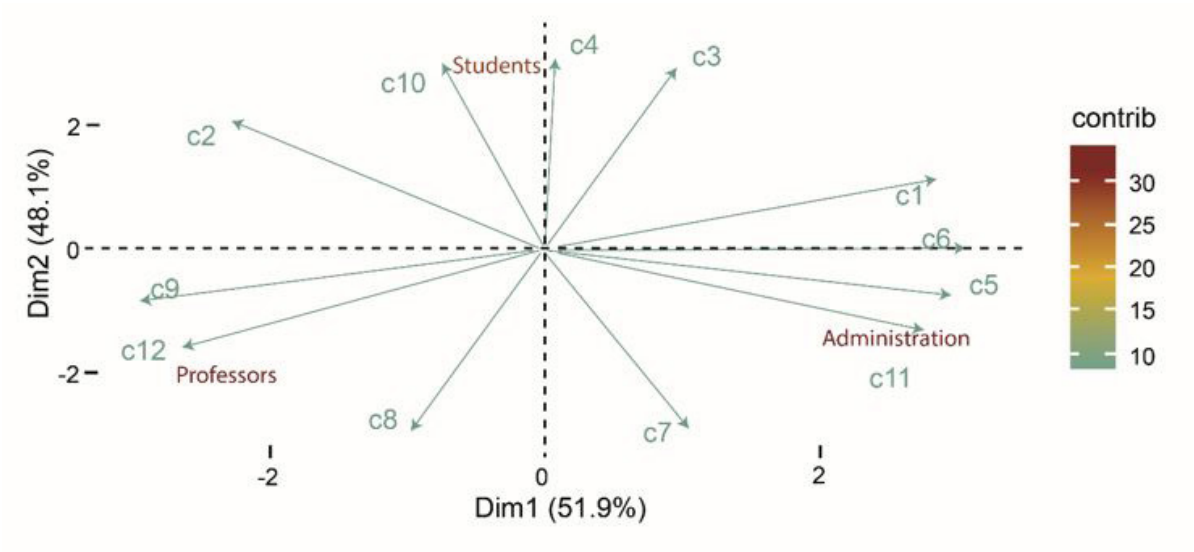

Figure 3. Analysis of the main components of the responses received by each university community group about the constituent elements for Health Promoting University Institutional policy. c1: "Culture of care for natural resources", c2: "Gender Equality and Empowerment of Women", c3: "Institution that promotes university campuses with green, oxygenated, quiet, and clean environments", c4: "Institution that contemplates promoting health transversally in the various academic programs, courses, and practice spaces. It contributes to the integral formation of students", c5: "Environmentally friendly infrastructure, c6: Healthy and nutritious food, recreation, and sport", c7: "Well-being, quality of university life, and health education", c8: "Protection of ecosystems and care of the environment", c9: "Development of mental, cognitive, emotional, and relational skills", c10: "Job opportunity, decent work, and economic growth", c11: "Intra-institutional and extra-sectoral articulation that guarantees the fulfillment of development objectives", c12: "Democratic, just and peaceful environments".

Discussion

The concept of a Health Promoting University prioritizes health promotion initiatives aimed at the university as an environment that fosters an excellent quality of life over the strategies of changing the habits of individuals [8]. To achieve this goal, the formulation of a Health Promoting University policy must consider the opinion of the individuals or communities that are part of the university, giving the deserved importance to each one [8,9]. In addition, as mentioned by Martínez-Riera et al, strategies designed for a health promotion program must respond to the needs identified by all members of the university community [10].

In concordance with the Okanagan Charter [11], high education institutions have the opportunity and responsibility to provide a transformative experience to their students. And additionally, develop knowledge and guide the policy-makers in the design of plans focused on the wellness of communities. The Universidad del Valle currently has the challenge of projecting itself to 2025 as a Health Promoting University registered in the Strategic Development Plan 2015-2025 [2]. This study contributes to this challenge by conducting rigorous work that allows to show the global opinion of the university population about their well-being and incorporate it into the formulation and implementation of an institutional policy.

It is important to emphasize that the survey used in this paper focused on the concept of health as a positive and welfare-focused term, not as a term necessarily associated with disease [12]. In this sense, this study was based on the Emancipatory Promotion of Health (EPH) model described by Chapela, which considers a primary

condition for health, the emancipation of subjects, and the alleviation of poverty and disease as a result of it. Unlike the empowering model, which prioritizes the relief of illness, where empowerment is manifested in the prevention of diseases [13]. Rather than providing knowledge and intervention strategies for the participants to adopt, the research sought the generation of reflections from them. Consequently, they would signify from their subjectivity the design of the Health Promoting University as a space inhabited by each university community group.

The results obtained in this study align with national and international movements that promote the culture of health care, the development of life skills, and the strengthening of healthy environments in an academic setting [1,3,8,9,11]. Although the higher participation of women in the survey is highlighted, it was expected considering that it has already been reported that women are generally more likely to contribute to surveys [14]. The general opinions of the university community about the concept of health were "Eating healthy and balanced" and "Feeling good about the person you are, most of the time." These responses align with the topics of self-care [15] mental health [16,17], and nutrition [8,18,19], which have been extensively studied in the context of health promotion.

Considering that one of the most common responses about the concept of a Health Promoting University was: an "Institution that works for a culture of health care through social and environmental interventions aimed at improving the quality of life of the university community members," it is learned that participants understand that health care goes beyond strengthening medical care —including not only the person as an individual but as part of a collective that, in turn, influences the environment around him.

A healthy environment significantly affects individual health, not only the physical but also mental health. On the one hand, the mental health assessment is consistent given the relationship between the [healthy] university and the psychosocial factors associated with the study participants' cultural capital [20,21]. The validation of the environment and its relationship with health and well-being leads to analyzing the separation or segmentation that has been made between the mental and physical aspects, and the contribution of social conditions. Considering that neuropsychiatric disorders contribute to 28% of the total adjusted disabilities per year generated from non-communicable diseases, being almost three times more frequent than cancer [22], future developments of the subject should be made from a "critical-qualitative perspective" point of view [23]. Mental health (and its intervention strategy) can be approached as an exercise in discovering the configurations of human spaces and seeking the autonomy of the body-territory. An example of a university that has paid close attention to the community mental health is the Universidad Nacional de Lanús, making numerous proposals and methods of approaching psychosocial problems and mental health considering the history of the Argentine people. Among these proposals there are the characterization from health and not from disease, the construction of meeting spaces linked to the daily life of people, and the development of interdisciplinary and comprehensive health practices [24].

At this point, it is essential to note that in promoting health, ecological definitions and practices consider health as the balance between the individual physical body and the material environment and the very balance of that environment. Many factors affecting the environment depend on the population's degree of knowledge of their effects on their well-being and quality of life —recognizing the role played by governments in implementing public policies that encourage the creation of healthy environments involving communities not only for such creation but also for their maintenance [25].

Another of the prioritized responses to the concept of a Health Promoting University was "Institution that promotes the development of knowledge, skills, and abilities that generate awareness for self-care and management of one's well-being." This opinion emphasizes a more individualistic aspect that focuses on ways to care for one's physical and mental health, contributing to the person's well-being [15].

In general, these expressions reaffirm the work of a Healthy University, which must integrate work for the physical and psychosocial environments into its proposals without forgetting individual interventions. It cannot be ignored that the mental health of university students is a serious public health problem in which high levels of anguish, stress, and pressure are reported, which in turn are reflected in poor academic performance and deterioration of physical health. and emotional, affecting their quality of life. Something that aggravates the situation is that most of these students do not seek professional help [17]. In this sense, a Health Promoting University must guarantee that adequate treatment is available in addition to promoting the destigmatization of mental health problems.

Regarding the elements that constitute a Health Promoting University institutional policy, the responses "Quality education that is inclusive and equitable" and "Well-being, quality of university life and health education" were accentuated. The importance that the participants gave not only to the quality of education but also to the quality of life within the university is highlighted, which allows reflection on how a healthy environment can positively influence effective learning, and in turn, on the excellent quality of life and well-being [26]. In the same way, it is essential to associate the term in-

clusive and equitable education with the concept of a Healthy University. This is because it involves attention to academic needs and personal development (including social skills for coexistence, problem-solving skills, and self-care in the university community), especially in the vulnerable population who has experienced marginalization and discrimination, incorporating equitable and inclusive practices and overcoming oppressive, unjust, and exclusionary patterns [27].

Most respondents were students since they are the majority in the university, forming a floating population of significant variability with diverse cultures, traditions, and beliefs, which is also renewed periodically [10]. Their perspective is key to developing a health-promoting university, as Becerra-Bulla [8]. However, it is important to highlight that the experiences of the universities in relation to health promotion are extensive and heterogeneous, some of them oriented towards the development of healthy habits and lifestyles as shown by the Universidad Nacional de Colombia, Bogotá headquarters when presenting their experience around health promotion from a nutrition and food perspective. Similarly, the Universidad Militar Nueva Granada, the Universidad de Ibagué, and the Universidad Santiago de Cali have also sought to implement Health Promoting University practices to promote good habits and health in the university community [28-30].

Study limitations

The results cannot be generalized to the students, university administration, and professors in the private sector since this study was conducted only in one public university. Participants from private, higher education schools and a qualitative research methods or techniques to interpret and deepen the quantitative data should be included in future studies to analyze differences between sectors. Moreover, although we extended the invitation to participate on the survey to all faculties of the university, there were some of them that participated more than others. Hence, applying this survey to more students from different faculties and could expose different results. Another limitation of the study is that a non-probabilistic sampling was conducted instead of a random sample because the lists of potential participants were unavailable, so the results obtained cannot be used to make a population inference since a complete coverage of the population is not guaranteed.

Conclusions

The survey applied in this study allowed us to know the perspective of the university community members, including the differences between the students, professors, and administrators regarding concepts related to a Health Promoting University. According to the answers collected, it was perceived that participants' mindsets shifted from traditional health biologistic imaginaries to integral health concepts —giving notable prevalence to mental health—which is consistent with the postulates of the WHO and its action plan on mental health issues for 2013-2030. From this perspective, a Health Promoting University must promote well-being and healthy environment management with the purpose of overreaching assistance-driven and prescriptive well-being and favoring comprehensive social and environmental interventions aimed at social development and improving the quality of life of its community through comprehensive, participatory, and dialogical healthy policies. In addition, this study contributes to the integration of the SDG in terms of health and well-being, and quality education in a university environment.

Acknowledgments

Thanks to the Research Office of the National University of Colombia for funding this research.

Funding source

This study was part of the project called "Design, management and approval of the Healthy University policy and implementation of the lines of action" and was financed by the Vice President of the Universidad del Valle as it was part of the strategic development plan of the University under the act number 05217.

Conflicts of interest statement

We declare that we have no conflicts of interest to report.

Declaration of responsibility

We declared that the authors are responsible for the information provided in this document and its veracity.

Author contributions

All authors contributed to the conception and design of the article as well as to the acquisition, analysis or interpretation of the data. All authors participated in the design of the research work or in the critical review of its intellectual content. Al authors approved of the final version to be published and are responsive to all aspects of the article ensuring that issues related to the accuracy or completeness of any part of the work are adequately investigated and resolved.

Supplemental material 1.

Survey. Health concepts and constituent elements for the formulation of a Health Promoting University institutional policy.
(Please organize from 1 to 12, being 1 your priority and 12 the less important for you)

1. What is Health?

Options:
- Feel good about who you are, most of the time.
- Eat healthy and balanced.
- Manage emotions in the face of constant changes offered by the physical, social and political environment.
- Caring for and ensuring a healthy and sustainable environment.
- Do at least 150 minutes of physical activity per week.
- Enjoy green, oxygenated, calm and clean environments.
- Respect the individuality and integrity of the other to promote a healthy coexistence.
- Being supportive or humanitarian with those around you.
- Resolve your own conflicts through dialogue.
- Carry out individual and collective actions that favor the care of the environment.
- Relate, and state feelings and emotions with those around you.
- Attend medical service at least once a year.

2. What is Healthy University?

Options:
- An institution that promotes actions that promote and strengthen health from the articulation of the different university actors.
- An institution that works for a culture of health care through social and environmental interventions aimed at improving the quality of life of the university community.
- An institution that favors the realization of creative and innovative strategies in their environments, in favor of improving the quality of life of the university community.
- An institution that contemplates promoting health transversally in the academic programs, courses and practice spaces. Contributes to the comprehensive training of students.
- Institution that promotes university campuses with green, oxygenated, calm and clean environments.
- Institution that promotes the development of knowledge, abilities and skills that generate awareness for self-care and management of one's own well-being.
- An institution that strengthens the social fabric and creates conditions for development, healthy coexistence and respect.
- Institution that strengthens the culture of cooperation and union to achieve objectives for the well-being of the university community.

3. Constituent elements

Options:
- Well-being, quality of university life and health education.
- Protection of ecosystems and care for the environment.
- Investment in clean energy sources.
- Healthy and nutritious food, recreation and sports.
- Gender Equality and Women's Empowerment.
- Quality, Inclusive and Equitable Education.
- Environment-friendly infrastructure.
- Democratic, fair and peaceful environments.
- Development of mental, cognitive, emotional and relational skills.
- Culture of caring for natural resources.
- Job opportunity, decent work and economic growth.
- Intra-institutional and extra-sectoral articulation guarantees the fulfillment of development objectives.

References

1. Duarte Cuervo CY. Comprensión e implementación de la promoción de la salud en instituciones de educación superior en Colombia. Rev Salud Pública. [internet]. 2015 nov. [cited 2022 December 13]; 17(6):899-911. Available from: https://revistas.unal.edu.co/index.php/revsaludpublica/article/view/44713
2. Oficina de planeación y desarrollo institucional – Universidad del Valle. Plan Estratégico de Desarrollo de la Universidad del Valle, 2015-2025. Cali; 2015. Available from: https://proxse16.univalle.edu.co/~planeacion/Analisis/Plan/pd2015-2025/revision/PED_2015-2025-31122016-Publicado.pdf
3. Rincón-Méndez AY, Mantilla-Uribe BP. Universidades Promotoras de la Salud: Reflexión para su implementación desde los determinantes sociales de la salud. Univ Salud. 2020;22(1):24-32. doi: https://doi.org/10.22267/rus.202201.171
4. Alcaldía mayor de Bogotá. Guía para la formulación e implementación de políticas públicas del Distrito. Bogotá; 2017. Available from: https://www.alcaldiabogota.gov.co/sisjurMantenimiento/adminverblobawa?tabla=T_NORMA_ARCHIVO&p_NORMFIL_ID=10895&f_NORMFIL_FILE=X&inputfileext=NORMFIL_FILENAME
5. Rodríguez Vital A, Nieto Ramos L, Ramos Rivera J. Avances y desafíos de Colombia para el alcance del ODS-7 de la agenda 2030 de las naciones unidas. Revista de Ciencias Humanas, Teoría Social y Pensamiento Crítico 2021;1:120–33. Available from: https://encuentros.unermb.web.ve/index.php/encuentros/article/view/152/165
6. Yan S, Kwan YH, Tan CS, Thumboo J, Low LL. A systematic review of the clinical application of data-driven population segmentation analysis. BMC Med Res Methodol. 2018;18:121. doi: https://doi.org/10.1186/s12874-018-0584-9

7. Greenacre M, Groenen PJF, Hastie T, D'Enza AI, Markos A, Tuzhilina E. Principal component analysis. Nat Rev Methods Primers. 2022;2:100. doi: https://doi.org/10.1038/s43586-022-00184-w
8. Becerra-Bulla F, Pinzón-Villate G, Vargas-Zárate M. Hacia la creación del programa universidad promotora de la salud desde la alimentación y nutrición en la universidad nacional de Colombia, sede Bogotá. Rev. Fac Nac Salud Pública. 2011;59(1):S67-76. Available from: https://www.redalyc.org/articulo.oa?id=576363547008
9. Suárez-Reyes M, Muñoz Serrano M, Van den Broucke S. How do universities implement the Health Promoting University concept? Health Promot Int. 2019;34(5):1014-24. doi: https://doi.org/10.1093/heapro/day055
10. Martínez-Riera JR, Gallardo Pino C, Aguiló Pons A, Granados Mendoza MC, López-Gómez J, Arroyo Acevedo HV. La universidad como comunidad: universidades promotoras de salud. Informe SESPAS 2018. Gac Sanit. 2018;32:86-91. doi: https://doi.org/10.1016/j.gaceta.2018.08.002
11. wellbeing.ubc.ca [Internet]. Vancouver: The University of British Columbia; c2023 [cited 2023 April 19]. Available from: https://wellbeing.ubc.ca/okanagan-charter
12. Rodríguez M, Couto M, Díaz N. Modelo salutogénico: enfoque positivo de la salud. Una revisión de la literatura. Acta Odontol Venez. 2015;53(3):1–12. Available from: https://www.actaodontologica.com/ediciones/2015/3/art-19/#:~:text=Este%20nuevo%20modelo%20salutog%C3%A9nico%20plantea,se%20desvincula%20del%20enfoque%20patog%C3%A9nico
13. Chapela M. Promoción de la salud. Un instrumento del poder y una alternativa emancipatoria. In: Guinsberg E, Jarillo E, editors, La salud colectiva en México. Temas y desafíos. Buenos Aires: Lugar Editorial, 2007; pp. 347–373. Available from: https://digitalrepository.unm.edu/lasm_cucs_es/163/
14. Hawkins J, Kieffer EC, Sinco B, Piatt G, Jones L, Mitchell J, et al. Using Path Analysis and Linear Regression to Test for Gender and Participation: Effects in a Culturally Tailored Diabetes Intervention for Latino Adults. Int J Environ Res Public Health. 2022;19(19):11982. doi: https://doi.org/10.3390/ijerph191911982
15. Narasimhan M, Allotey P, Hardon A. Self care interventions to advance health and wellbeing: a conceptual framework to inform normative guidance. BMJ. 2019;365:l688. doi: https://doi.org/10.1136/bmj.l688
16. Grégoire S, Lachance L, Bouffard T, Dionne F. The Use of Acceptance and Commitment Therapy to Promote Mental Health and School Engagement in University Students: A Multisite Randomized Controlled Trial. Behav Ther. 2018;49(3):360-72. doi: https://doi.org/10.1016/j.beth.2017.10.003.
17. Viskovich S, Pakenham KI. Randomized controlled trial of a web-based Acceptance and Commitment Therapy (ACT) program to promote mental health in university students. J Clin Psychol. 2020;76(6):929–51. doi: https://doi.org/10.1002/jclp.22848
18. Koci J, Chvál M. Nutrition education intervention: An effective tool for health promotion and primary prevention. ASV. [Internet]. 2020 Jul. [cited 2023 April 21];8(1):29-34. Available from: http://odborne.casopisy.palestra.cz/index.php/actasalusvitae/article/view/223
19. Wongprawmas R, Sogari G, Menozzi D, Mora C. Strategies to Promote Healthy Eating Among University Students: A Qualitative Study Using the Nominal Group Technique. Front Nutr. 2022;9:821016. doi: https://doi.org/10.3389/fnut.2022.821016
20. paho.org [Internet]. Organización Panamericana de la Salud - Determinantes sociales de la salud - OPS/OMS [cited 2022 May 15]. Available from: https://www.paho.org/es/temas/determinantes-sociales-salud.
21. Campbell F, Blank L, Cantrell A, Baxter S, Blackmore C, Dixon J, Goyder E. Factors that influence mental health of university and college students in the UK: a systematic review. BMC Public Health. 2022;22:1778. doi: https://doi.org/10.1186/s12889-022-13943-x
22. Harmer B, Lee S, Duong TVH, Saadabadi A. Suicidal Ideation. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022. Available from: https://www.ncbi.nlm.nih.gov/books/NBK565877/
23. Chapela MD. Vínculo intersubjetivo: alternativa de cambio en las profesiones de la salud humana. Rev Fac Nac Salud Pública. 2009;27(1):76-80. Available from: https://www.redalyc.org/articulo.oa?id=12027113.
24. Bottinelli MM, Frankel D, Nabergoi M, Remesar SE, Díaz F, Garzón AC, et al. Propuestas formativas fundantes en salud mental. Lanús: antecedentes en la formación interdisciplinaria y comunitaria en salud mental integral. VII Congreso Internacional de Investigación y Práctica Profesional en Psicología XXII Jornadas de Investigación XI Encuentro de Investigadores en Psicología del MERCOSUR. Facultad de Psicología - Universidad de Buenos Aires, Buenos Aires. 2015. Available from: https://www.aacademica.org/000-015/578
25. Coronel Carbo J, Marzo Páez N. La promoción de salud para la creación de entornos saludables en América Latina y el Caribe. Medisan. 2017;21(12):3415–23. Available from: https://medisan.sld.cu/index.php/san/article/view/1822
26. Zandvliet DB, Stanton A, Dhaliwal R. Design and Validation of a Tool to Measure Associations between the Learning Environment and Student Well-Being: The Healthy Environments and Learning Practices Survey (HELPS). Innov High Educ. 2019; 44(4):283–97. doi: https://doi.org/10.1007/s10755-019-9462-6
27. Centro de Estudios Educativos. Educación equitativa e inclusiva. Revista Latinoamericana de Estudios Educativos. 2015;45(4):5–12. Available from: https://www.redalyc.org/articulo.oa?id=27043549002
28. Estrada González C, Naranjo Rojas A, Endo Collazos N, Ramírez Correa C, Muñoz Cuartas L, Rosero Pérez M, et al. Universidad saludable una estrategia interdisciplinaria para la construcción de un entorno saludable. Cali: Editorial Universidad Santiago de Cali; 2018. pp. 1-232. Available from: https://libros.usc.edu.co/index.php/usc/catalog/download/254/325/5130?inline=1
29. Mazorco-Salas JE, Rojas-León GA, Gómez-Romero, RF, Duarte-Rueda, JR, Granados-Mendoza MC. Diseño de una metodología para la co-creación de ambientes saludables en entornos educativos universitarios. Hacia Prom Salud. 2021;26(2):49-67. doi: https://doi.org/10.17151/hpsal.2021.26.2.5
30. Rodríguez Villamil H, Guerra G YM. Implementación del proyecto de universidad saludable en la Universidad Militar Nueva Granada. Revista Educación y Desarrollo Social. [Internet]. 2013 ene. [cited 2023 April 21];7(1):143-52. Available from: https://revistas.unimilitar.edu.co/index.php/reds/article/view/742