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<sup>1</sup>Instituto de Investigación Social y Empresarial (IDISEM), Universidad Nacional del Altiplano, Puno, Perú, <sup>2</sup>Escuela Profesional de Educación Física. Universidad Nacional del Altiplano, Puno, Perú, <sup>3</sup>Departamento Académico de Ciencias y Tecnologías Sociales y Humanidades, Universidad Católica de Santa María, Arequipa, Perú, <sup>4</sup>Departamento de Ciencias de la Actividad Física, Universidad Católica del Maule. Talca. Chile. 5Centro de Investigación CINEMAROS, Arequipa, Perú, <sup>6</sup>Faculty of Education, Psychology and Sport Sciences, University of Huelva, Huelva, Spain, <sup>7</sup>Departamento de Diversidad e Inclusividad Educativa, Universidad Católica del Maule, Talca,

#### Address for correspondence: Dr. Marco Cossio-Bolaños, Av San Miguel s/n, Talca, Chile. E-mail: mcossio1972@ hotmail.com

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# Comparison of happiness in students of a public and private university in Peru

Walker Aragón-Cruz<sup>1</sup>, Sonia Laura-Chauca<sup>1</sup>, Percy Gómez-Bailón<sup>1</sup>, José Fuentes-López<sup>2</sup>, Katia Barrientos-Paredes<sup>1</sup>, María Bedoya-Gonzales<sup>1</sup>, Yudi Yucra-Mamani<sup>1</sup>, Claudia Flores-Gutiérrez<sup>3</sup>, Marco Cossio-Bolaños<sup>4,5,6</sup>, Rossana Gomez-Campos<sup>7</sup>

#### **Abstract:**

BACKGROUND: Happiness is a positive component of mental well-being. In young university students, it is linked to ideals in many areas, such as physical health, mental health, harmonious inter-personal relationships, academic performance, and professional success. The aim of the study was to compare the happiness of university students from a state and private university according to professional areas and age range.

MATERIALS AND METHODS: A descriptive cross-sectional study with selected 312 university students was conducted. The age range was from 17 to 32 years. The two professional areas surveyed were health sciences and engineering. Happiness was measured using a scale with 11 questions and four dimensions [1: Positive sense of life (three questions), 2: Satisfaction with life (three questions), 3: Personal fulfilment (two questions), and 4: Joy of living (three questions)]. The normality of the data was verified. Differences between sexes, areas, universities and ages were verified by t-test for independent samples. Differences between age ranges were verified by Anova.

RESULTS: This study showed that there were no differences in happiness between EU and UP students when compared by gender, professional area, and age ranges.

**CONCLUSIONS:** These results suggest that during the period of university studies, happiness values remain stable in both types of universities.

## **Keywords:**

Happiness, health, personal satisfaction, university students

## Introduction

Tappiness is a positive component of Imental well-being, generally defined as subjective enjoyment and satisfaction.[1] The classical literature has identified two broad aspects of subjective well-being, the first having to do with the affective (usually further divided into pleasant affect and unpleasant affect)[2,3] and the second having to do with the cognitive or also known as life satisfaction.[4]

In fact, the affective component refers to happiness and is an emotional appraisal of the degree of intensity and the content of positive personal experiences of happy

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moments in a person's life. [5,6] It is also defined as a positive emotional state, which includes feelings of well-being and pleasure, as well as a full and satisfying life.[7]

In general, happiness is a growing area of research in economics, so in recent years, there has been an ostensible increase in studies in various areas and stages of life,[8] especially in young university students.<sup>[9]</sup>

In general, at the university level, several key personal, family, and social factors have been identified as influencing students' happiness.[10] Therefore, studying happiness during the university period is relevant

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because it is linked to ideals in many fields, such as physical health, mental health, harmonious inter-personal relationships, academic performance, and professional success, [11-13] among other aspects.

At the Peruvian level in recent years, several studies related to happiness in university students have been conducted with various objectives. [14-16] However, to the best of our knowledge, at the national level, there are null studies that have compared two universities of state and private origin because the economic, political, social, and cultural environments to which young people belong [17] could produce differences among university students.

Consequently, research on university students in various regions of the world has shown that they have friendly social personalities and bright and optimistic view of themselves, their competence, and their future. In addition, they engage in more physical activity and present less tendency to anxiety. [18-22] This study assumes that there may be differences in happiness between students at public and private universities. Not always a more expensive education can generate higher levels of happiness among students, because in the Peruvian context, institutions in general are forced to develop strategies to organize and finance their resources efficiently. [23] Even some studies at the international level highlight that graduates from private universities were somewhat more likely to say that their education was useful in preparing them for a job or career than graduates from public universities. [24,25]

Therefore, the aim of the study was to compare the happiness of university students from a state and private university according to professional area and age range.

This information may be relevant to students' happiness because often before entering a university, they are interested in some aspects that have to do with facilities and services, curriculum, tuition, information about the school, and opinions of family and friends.<sup>[26]</sup>

## **Materials and Methods**

## Study design and setting

A descriptive comparative study was conducted on students from two Peruvian universities (state university and private university). The students of the state university were from the city of Puno, and those of the private university were from the city of Arequipa. Both are located in southern Peru. The professional areas of both universities were health sciences and engineering.

# Study participants and sampling

The sample selection was non-probabilistic (accidental). A total of 312 male and female students were recruited (141

from a state university and 171 from a private university). The age range was from 17 to 32 years. Socio-demographic characteristics can be seen in Table 1.

Students from both universities were contacted via e-mail to invite them to participate in the project in May and June 2022. Those who agreed to voluntarily participate in the study were completing the happiness scale on-line (google drive). Young people who were enrolled in the first and fourth years of studies were included. Those who had studied other professional areas and those who were enrolled for the second time in the same year were excluded.

# Data collection tool and technique

Happiness was measured using the survey technique. The instrument used was the scale proposed by Yucra-Mamani  $et\ al.^{[27]}$  This scale presents 11 questions and a total of four dimensions [1: Positive sense of life (three questions), 2: Satisfaction with life (three questions), 3: Personal fulfillment (two questions), and 4: Joy of living (three questions)]. The alternatives of the questions are Likert-type (1 to 5 points). The scale was previously validated for university students and presents a Cronbach's alpha reliability of r=0.89.

The scale lasts between 15 and 20 minutes. This procedure was applied during study hours (Monday to Friday, from 8:00 to 18:00 hours). Two persons were in charge of the application of the scale, one for each university.

## **Ethical consideration**

The authors maintained all protocols before performing all procedures in this study with human participants in accordance with the ethical standards of the research committee and the Declaration of Helsinki for Human Subjects.

Table 1: Characteristics of the sample studied

Variables	S	U	Р	U	Both Universities			
	n	%	n	%	n	%		
Gender:								
Men	86	61	100	58.5	186	59.6		
Women	55	39	71	41.5	126	40.4		
Total	141	100	171	100	312	100		
Ages:								
17-20	47	33.3	74	43.3	121	38.8		
21-24	70	49.6	78	45.6	148	47.4		
25-28	15	10.6	12	7	27	8.7		
29-32	9	6.4	7	4.1	16	5.1		
Total	141	100	171	100	312	100		
Professional Area								
Health Sciences	100	70.9	100	58.5	200	64.1		
Engineering	41	29.1	71	41.5	112	35.9		
Total	141	100	171	100	312	100		

Legend: SU=State University, PU=Private University

#### **Statistics**

The Shapiro–Wilk test was applied to verify the normality of the data. Once normality was confirmed, descriptive statistics were analyzed [frequencies, percentages, range, mean (X), standard deviation (SD)]. Differences between sexes, areas, universities, and ages were verified using the t-test for independent samples. Differences between age ranges (17–20 years, 21–24 years, 25–28 years and >29 years) were verified by one-way analysis of variance (ANOVA) and Tukey's test of specificity. In all cases, P < 0.05 was considered significant. The results were initially processed and analyzed in Excel spreadsheets and then in SPSS 18.0.

#### Results

Variables such as age, sex, age ranges, and professional areas are shown in Table 1. It should be noted that the students who participated in the research were 312 volunteers (186 men and 126 women) from two universities in Peru. The age range was from 17 to 32 years of age. Students from professional areas (health sciences and engineering) were surveyed.

Comparisons of the mean values of happiness between both universities can be seen in Table 2. There were no differences in each of the indicators and the total happiness scale between men and women of the same university (p > 0.05) and between universities when comparing men versus men and women versus women (p > 0.05).

The comparisons between both universities by professional area are shown in Table 3. No differences

were observed in the four indicators of happiness between both professional areas at both the state university and private university (p > 0.05). In addition, when compared between both professional areas between both universities, no significant differences were identified (p > 0.05).

The comparisons of the total values of the happiness scale by age range and by university can be seen in Figure 1. In the first two age ranges (17–20 years and 21–24 years), there were no differences; however, in the next two ranges (25–28 and 29–32 years), there were significant differences (p < 0.05). UP students significantly increased (p < 0.05) the mean values of happiness from

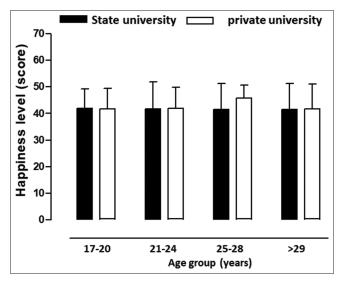


Figure 1: Comparison of the happiness scale in university students according to age ranges

Table 2: Comparison of the happiness scale in university students according to type of university

Happiness Indicators	State University				P	Private University				P	(P) M/M	( <i>P</i> ) F/F
	Males		Females			Males		Females				
	X	SD	X	SD		X	SD	X	SD			
Positive sense of life	11.8	2.8	11.6	3.1	0.692	12.3	2.7	12.2	2.6	0.808	0.217	0.239
Satisfaction with life	11.5	2.8	10.8	2.8	0.15	11.0	2.4	10.8	2.5	0.598	0.191	0.999
Personal fulfillment	6.9	2.1	6.9	1.7	0.999	6.9	1.7	6.9	1.8	0.999	0.999	0.999
Joy of living	12.3	2.4	11.4	2.8	0.044	12.2	2.2	12.2	2.0	0.999	0.767	0.063
Total Scale	42.4	8.7	40.7	9.6	0.279	42.3	7.5	42.1	7.6	0.864	0.933	0.295

Legend: X=Mean, SD=Standard deviation, M=Males, F=Females

Table 3: Comparison of the happiness scale in university students according to professional area

								<u> </u>				
Happiness Indicators	State University				P	Private University				P	Comparisons	
	Health s	ciences	Engineering			Health sciences		Engineering			(P) HS/	( <i>P</i> )
	Х	SD	X	SD		X	SD	X	SD		HS	E/E
Positive sense of life	11.6	2.8	12	3.2	0.462	12.4	2.6	11.9	2.7	0.224	0.037	0.86
Satisfaction with life	11.3	2.6	11	3.3	0.567	10.8	2.4	11	2.5	0.598	0.159	0.618
Personal fulfillment	6.9	1.8	6.7	2.2	0.576	6.9	1.7	6.9	1.8	0.999	0.999	0.622
Joy of living	12	2.5	11.9	2.7	0.833	11.9	2.2	12.2	2.2	0.066	0.764	0.846
Total Scale	41.8	8.7	41.7	10.1	0.953	42	7.4	42.4	7.8	0.734	0.861	0.957

Legend: HS=Health sciences, E=Engineering, X=Mean, SD=Standard deviation

age 25 onward in relation to EU students, who showed stable mean values of happiness in all age ranges.

## Discussion

The aim of this study was to compare the happiness of university students from a state and a private university according to professional area and age range. The results have shown that there were no significant differences in happiness between students in the health sciences and engineering areas of both universities.

These findings indicate that students from both universities have evidenced similar values on the happiness scale according to professional areas, gender, and age ranges. In fact, these results are consistent with some studies that have compared happiness levels in university students, where they indicate that gender is not relevant in happiness differences.<sup>[14,28,29]</sup> However, some studies have reported that women generally experience higher states of happiness than men.<sup>[30,31]</sup>

In relation to differences by professional areas, the results of this study have shown similar values of happiness between both professional areas in both universities. It seems that the fact that one university is state and the other is public did not affect the levels of happiness among students.

This could be because of the fact that happiness during the university stage is a transient feeling in life,<sup>[10]</sup> so it is considered a special period, where students begin to be independent, where they must adapt to changes in their personal lives and studies,<sup>[32]</sup> and where they can easily get stressed<sup>[33]</sup> and consequently cause changes in their happiness levels.

On the other hand, regarding comparisons of happiness levels among university students, studies in general are controversial. For example, some consider that happiness is perceived as a U-shape where middle-aged people decrease in happiness and then increase in older age, [34,35] whereas others highlight that happiness is basically flat, with no particular trend. [36,37] Apparently, these latter studies coincide with our findings, given that we observe stable values across age ranges in college students.

In any case, it is difficult to compare happiness across a narrow range of ages as it is apparently necessary to span an age range that encompasses all stages of life in order to infer the pattern of happiness in a given society. Meanwhile, the interpretation of happiness requires care, [38] so it is necessary to introduce longitudinal studies to verify changes in happiness patterns.

In fact, during the course of all stages of life, several factors have been evidenced that can affect the levels of human happiness. However, during the college stage, there are generally key personal, family, and social factors that influence college students' happiness.<sup>[10]</sup>

In sum, studies in general have shown in diverse populations that good peer relationships, regular physical activity, regular diet, and lack of drug dependence are positively associated with happiness.<sup>[39-43]</sup>

#### Limitation and recommendation

The study presents some strengths that deserve to be highlighted; for example, it is the first study conducted in Peru, comparing two universities (state and private); this information can serve as a baseline for future comparisons and verify changes between generations.

We also note that it presents some limitations that prevent generalizing the results, given that the sample selection was non-probabilistic. In addition, the research design used (cross-sectional) prevents us from obtaining causal relationships, so it is necessary for future studies to develop longitudinal studies at the university level.

#### Conclusion

In conclusion, this study showed that there were no significant differences in happiness between UE and UP students when compared by gender, professional area, and age ranges. These results suggest that during the period of university studies, happiness values remain stable in both types of university and professional areas of health and engineering, so future studies should examine happiness in other professional areas and design a longitudinal study to confirm these results.

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#### **Conflicts of interest**

There are no conflicts of interest.

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