Positive Mental Health and Depression in College Students in Metropolitan Lima

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Abstract

The objective of this research was to determine the relationship between Positive Mental Health and Depression in a sample of 252 university students from the National University of San Marcos (spanish: Universidad Nacional Mayor de San Marcos - abbr. UNMSM), of both sexes, with ages between 16 and 42 years, selected by an intentional non-probabilistic sampling. A quantitative method of non- experimental, descriptive correlational and cross-sectional design was used. The Lluch Positive Mental Health Questionnaire (spanish: Cuestionario de Salud Mental Positiva - abbr. CSMP) adapted by Marcelino (2013) and the Depression Inventory (BDI-IIA) adapted by Carranza (2013) were used as evaluation instruments. Statistical analysis was performed using SPSS version 22 software and the result was the existence of a statistically significant (p< .01), high negative (r= -.709) relationship between both variables and statistically significant relationships between all dimensions of positive mental health with the depression variable.

Keywords: Positive Mental Health; Depression; University Students

Introduction

Since 1948 the World Health Organization (WHO) understands health as a "state of complete physical, mental and social well-being and not merely the absence of disease and infirmity" (2018), which reveals a positive perspective, that is, a vision that prioritizes disease prevention and health promotion, justifying the adoption of a biopsychosocial model [1-3].

But in practice, whether by physicians or psychologists, the term "health", whether physical or mental, is focused more on interventions aimed at relieving pain and addressing problems that appear at the moment, than on promoting well-being and health in order to prevent discomfort, noticing the predominance of the disease model [4-6]. In addition, in the early years of this new century, there was still the problem of defining mental health and distinguishing it from "ausencia de enfermedad psiquiátrica" (absence of psychiatric illness) and "área de bienestar y del campo de la promoción de la salud" (the area of welfare and the field of health promotion) [7].

An explanation of this was given by Lluch [4], who mentions that mental health is "un constructo que no tiene una definición directa" (a construct that has no direct definition) (p. 16), since mental health "no es algo estático y definitivo sino un estado dinámico y cambiante" (is not something static and definitive but a dynamic and changing state) (p. 18).

She presents us 3 difficulties to conceptualize it: 1) considering it as a construct, 2) the existence of difficulties in differentiating it from the term "mental illness", and 3) the definition that each society or culture gives to mental health and mental illness (p. 16-18). However, the author also presents us with 3 perspectives that could help define mental health:
positive/negative perspective, 2) perspective of normality, and 3) multi-criteria perspective.

Faced with these problems of conceptualization, Marie Jahoda first proposed the term "positive mental health" in 1958 in order to deepen the description of the concept of mental health and to present a community model that promotes mental health rather than the prevention of disease. For that she conceptualized positive mental health from multiple criteria or interrelated factors, which according to Jahoda (1958, in Lluch, 1999) include six criteria, they are [4]: 1) Attitudes towards oneself. Comprised of 4 specific factors: Accessibility of the self to consciousness, Concordance of the real self-ideal self, Self- esteem and Sense of identity; 2) Growth and self-updating. Comprised of 2 specific factors: Motivation for life and Involvement in life; 3) Integration. Individual prototype of response to anxiety. It includes a specific factor: resistance to stress, involves the use of coping strategies to maintain an adequate level of integration in situations of pressure; 4) Autonomy. Conscious discrimination of environmental factors that you want to accept or reject. It comprises a specific factor: Independent Conduct; 5): Perception of reality. Comprised of 2 specific factors: Objective Perception and Empathy or Social Sensitivity; and 6) Domain of the environment. Comprised of 6 specific factors: Sexual Satisfaction; Adequacy in love, work and free time; Adequacy in interpersonal relationships; Ability to meet the demands of the environment; Adaptation and Adjustment, and Problem Solving.

Lluch defends the study of mental health from a positive perspective, since it allows the identification of personal skills and emphasizes work, encouraging in this way the promotion of resources [8]. When she realized that the study on positive mental health carried out by Marie Jahoda did not have empirical evidence, in 1999, after three consecutive studies, Lluch managed to construct a Likert scale to evaluate positive mental health with 6 general unidimensional, interrelated factors, distributed in 39 items in total. Contributing in this way with a new instrument to psychology to assess people's capabilities and resources, as these are scarce compared to the large number of instruments that assess symptoms and problems, or suffering and discomfort [5].

The 6 dimensions of the Definitive Positive Mental Health Scale found by Lluch are [4]: 1) Personal Satisfaction: Includes self-concept and satisfaction with both personal life and future prospects; 2) Prosocial Attitude: Active predisposition to present an altruistic social attitude and acceptance of others and differential social facts); 3) Self-control: Ability to cope with conflictive situations, maintaining emotional balance, tolerating anxiety and stress; 4) Autonomy: Ability to have your own criteria, show independence and self-regulation of your own behavior, expressing personal security and self-confidence: and 5) Problem Solving and Self-actualization: Understands the capacity for analysis, the ability to make decisions and the ability to adapt to changes, thus presenting

an attitude of growth and continuous personal development.

6. Interpersonal relationship skills: Understands the ability to establish intimate and lasting interpersonal relationships, managing to understand the feelings of others in order to provide emotional support.

The positive mental health construct has had similar conceptualizations, for example for Mettifogo, Martínez, Covarrubias, Fernández, Zepeda and George. it is the "capacidad para proveer bienestar psicológico y facilitar el logro de metas individuales y colectivas" (capacity to provide psychological well-being and facilitate the achievement of individual and collective goals) [9]. For Lluch (2015) it is "un constructo dinámico y fluctuante que incluye pensamientos y, muy especialmente, sentimientos tanto positivos como negativos" (a dynamic and fluctuating construct that includes thoughts and most especially positive and negative feelings) [10]. Even the WHO (2004) has dared to define positive mental health, from a psychoanalytic approach [11], as "Positive mental health allows us to enjoy life's pleasures, believe in our own abilities, cope with the normal stresses of life, work/study productively and enjoy socialising" - the capacity of the person to use his or her internal energy for his or her fulfilment in emotional, intellectual and sexual aspects) (pp. 22-23). It is worth clarifying that the psychoanalytic stance differs from the positive psychology, the current focus of this research. In that the latter is dedicated to studying the conscious world and the positive aspects of the human being; while psychoanalysis focuses on the unconscious world and the negative experiences of people [12].

For the present study positive mental health is conceptualized as the "estado de funcionamiento óptimo de la persona, producto de la interacción de múltiples factores, presentando atributos de personalidad que protegen al individuo de enfermar o contribuyen en su recuperación o rehabilitación de dificultades o trastornos" (state of optimal functioning of the person, product of the interaction of multiple factors, presenting personality attributes that protect the individual from becoming ill or contribute to his recovery or rehabilitation from difficulties or disorders) [4-13].

Problem Statement

Depression has been defined, according to the International Classification of Diseases (ICD-10, 2003) as a mood (affective) disorder in which the person presents symptoms such as decreased energy and activity [14], discouragement, disinterest, distrust of one self, ideas of guilt and loss of the ability to enjoy. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2014) depression is a mental disorder that causes irritability,

sadness, hopelessness, sleep disturbance, low self-esteem, and lack of concentration [15].

Globally, people with major depression and schizophrenia have a 40% to 60% greater chance of dying prematurely than the general population [16]. Depression alone affects more than 300 million people worldwide, making it the world's leading cause of disability, affecting more women than men. If the severity is very high it could lead to suicide, and this is already recognized as the second cause of death in people aged 15 to 29 in the world [17].

At national level, according to data from the Statistics and Information Office of the Honorio Delgado- Hideyo Noguchi National Institute [18], the second largest number of people treated were those with depressive episodes. Schizophrenia was the first and anxiety disorders the third.

If "los problemas de salud mental comprenden a los problemas psicosociales y a los trastornos mentales y del comportamiento" (mental health problems include psychosocial problems and mental and behavioural disorders) [19], governments need to plan and implement mental health policies that have a greater impact on the population, since, at least in Peru, "de cada 10 personas con morbilidad sentida y expresada por trastornos mentales, dos de ellas consigue algún tipo de atención" (of every 10 people with felt and expressed morbidity from mental disorders, two get some kind of attention).

Considering this the Peruvian government implemented Community Mental Health Centers (CSMC) in various regions of the country. These have a positive vision of mental health, since they are aimed, in addition to psychotherapeutic intervention, at disease prevention and health promotion [20], actively involving the individual, his family and his communities. But it was not enough. If Peru wanted to have mentally healthy professionals, then the state had to be concerned about the mental health of its university students since "la población universitaria representa el capital humano que sustentará el futuro desarrollo del país" (the university population represents the human capital that will sustain the future development of the country) [21].

That is why on October 15, 2019 the first University Community Mental Health Center was inaugurated in Lima, exactly in the National University of San Marcos [22]. It is for this reason that the results of this study will contribute with updated information on the state of positive mental health and depression of the students of said university, in order to carry out the planning and execution of preventive-promotional and intervention programs in charge of its CSMC, as well as contribute with theoretical-practical information on positive mental health.

Reviewing the literature of positive mental health there is little research on university population. For example, Anicama, et al. (2012) found a statistically significant low relationship (p <.01, r=0.206) between self-efficacy and Positive Mental Health (PMH) in 250 psychology students of the 2nd, 3rd, and 4th year [9]. For their research the PMH scale presented a reliability of .85 and its factors exceeded .70 except for factor 2: prosocial attitude (r = .60), and there were significant differences according to age and year of study (p < .05).

On the other hand, Riveros [23], in his doctoral thesis, made the semantic adaptation of the PMH scale on university population using a sample of 550 students of the freshman year of a private university in northern Peru, finding evidence of validity and reliability (r = 0.88). He found a statistically significant high and negative relationship (p < .05, r = - .72) between both variables, concluding that the higher the positive mental health, the lower the alexithymia.

Saavedra conducted a study in which he found that positive mental health factors significantly influenced the academic performance of 96 nursing students in Trujillo [24]. While in Puno, Murillo [25] applied the PMH scale to 222 nursing students finding that 50.9% of them had a high level, 47.7% were in the middle level, and 1.4% were in the low level.

Regarding depression, Riveros, Hernández and Rivera [26] found that women had greater severity of depression (mild, moderate and severe) and greater anxiety than men in a sample of 500 students at the UNMSM. Years later, Carranza [1] adapted the Beck Depression Inventory in Metropolitan Lima in a sample of 2005 university students. He found validity and reliability of the instrument according to several techniques (Cronbach's alpha = .878; two halves, r= .799; correlation coefficient pairs and nones, r= .803 and stability by means of the test-retest coefficient, r= .996) and he established the scales and cut-off points.

A recent study by Perales, et al. [21] using a sample of 1819 UNMSM undergraduate students, found that being female, having depression, anxiety, and living in a non-nuclear home act as risk factors for a student to commit suicide. They also found that 22% of the sample had suicidal ideation and 11% had attempted suicide. The chilling data was that 39% of those who attempted suicide did so because of problems with their parents, and 30% did so because of problems in school. For all the above mentioned reasons, the present research is aimed at solving the following problem: what is the relationship between positive mental health and depression in undergraduate students of a public university in Metropolitan Lima?

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The general objective of the study is to determine the relationship between positive mental health and depression in undergraduate students at a public university in Metropolitan Lima, and presents four specific objectives: 1) to analyze the reliability of the instruments, 2) to explore the level of student depression according to sex and professional area, 3) to analyze the significant differences of the variables according to sex and professional area, and 4) to determine the relationship between positive mental health factors and depression.

The general hypothesis is: there is a significant relationship between positive mental health and depression in undergraduate students of a public university in Metropolitan Lima, and as specific hypothesis: 1) both instruments have an adequate level of reliability, 2) there are significant differences in both variables according to gender and professional area, and 3) there is a significant relationship between positive mental health factors and depression.

Method

The present study is of quantitative type and a non-experimental design, since the variables are not manipulated; descriptive correlational, since its objective is to describe the results and to relate the variables; and cross-sectional, since it is the application of the instruments in a single moment [27]. The type of sampling is intentional non-probabilistic taking into account the following inclusion criteria: 1) to be enrolled in the 2019-II semester, 2) to be an undergraduate student at the UNMSM, and 3) to answer all the items of the psychological instruments.

The sample was made up of 263 students from the National University of San Marcos. However, the data of 11 participants was eliminated because they did not meet the inclusion criteria, leaving 252 male (n=129) and female (n=123) students from the 5 professional areas of academic study at the university: Health Sciences (n=69), Basic Sciences (n=40), Engineering (n=39), Economics and Management Sciences (n=40), and Humanities and Legal and Social Sciences (n=64), between the ages of 16 and 42.

Data Collection Instrument

The Lluch-Canut Positive Mental Health Scale [4] of the Likert-type consisting of 39 items with four response options was used. The minimum score is 39 and the maximum is 156. The administration of the test is individual and collective, its application is directed to adolescents, young people and adults and lasts between 10 and 15 minutes approximately. The scale is intended to evaluate total positive mental health and its 6 factors: Personal Satisfaction, Prosocial Attitude, Self-control, Autonomy, Problem-solving and Self-actualization, and Interpersonal Relationship Skills. It was semantically adapted to Peru by Marcelino Riveros Quiros (2013) for the university population, finding evidence of validity and reliability (r = 0.88).

Regarding depression, the adapted Beck Depression Inventory (BDI-IIA) of the Likert-type consisting of 21 items with four response options was used. The minimum score is 0 and the maximum is 63. Created by Aaron T. Beck, Robert A. Steer and Gregory K. Brown in the United States. Adapted to spanish by María Elena Brenlla, and to the university population of Metropolitan Lima by Felipe Carranza [1], maintaining the 21-item structure, finding evidence of validity and reliability (Cronbach's alpha r= .878). The administration of the test is individual and collective, its application is aimed at adolescents, young people and adults and lasts approximately 10 to 15 minutes. Its objective is the evaluation of the severity of the Depression.

Procedure

The study was carried out during the months of October and November 2019. The evaluator randomly selected the faculties and asked the professor in charge for 10 to 15 minutes to apply the tests to the students in the classroom, letting him or her know the importance of the research. The instructions were explained to the participants and they were given the necessary time to solve both instruments. The data was introduced into the statistical program SPSS version 22. The data of the subjects who did not meet some inclusion criteria were eliminated and finally the descriptive and inferential statistical analysis was carried out.

Results

Reliability of Instruments

Factors	Cronbach's alpha Total Subscale
F1: Personal Satisfaction	.747
F2: Prosocial Attitude	.632
F3: Self-control	.847
F4: Autonomy	.755
F5: Problem-solving and Self-actualization	.858
F6: Interpersonal Relationship Skills	.753
Total PMH Scale	.927
Total BDI-IIA	.927

Table 1: Reliability of the factors of the PMH scale, total PMH and BDI-IIA for internal consistency.

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As shown in Table 1, the internal consistency coefficient (Cronbach's alpha) for the total PMH scale was .93 and values greater than .70 were obtained in five of the six dimensions. Only at factor 2 (Prosocial Attitude) Cronbach's alpha was .63. The internal consistency coefficient (Cronbach's alpha) for the total BDI-IIA was also .93, which indicates that both instruments have an adequate level of reliability.

Descriptive Statistics of the Variables

With regard to positive mental health, let us remember

that the total score of the PMH scale ranges from 39 minimum to 156 maximum. Table 2 shows that the average total score obtained by students on the PMH scale was 121.79 points (SD 16,492), with a minimum value of 57 and a maximum value of 156 points. Let us recall that the total score of the Beck Depression Inventory ranges from 0 minimum to 63 maximum. Regarding the BDI-IIA, the average total score obtained by the students was 13.82 points (SD 10.272), with a minimum value of 0 and a maximum value of 48 points.

	Minimum	Maximum	Average	Standard Deviation
F1: Personal Satisfaction	8	54	26,80	4,825
F2: Prosocial attitude	9	20	16,44	2,206
F3: Self-control	5	20	14,16	2,924
F4: Autonomy	5	20	15,26	2,744
F5: Problem-solving and Self-actualization	14	36	27,88	4,752
F6: Interpersonal Relationship Skills	9	38	21,25	3,646
Total PMH Scale	57	156	121,79	16,492
Total BDI-IIA	0	48	13,82	10,272

Table 2: Descriptive statistics from the Positive Mental Health Scale and the adapted Beck Depression Inventory.

Levels of Depression According to Gender and Professional Area

Currently there are no scales for the PMH scale for

university students in Metropolitan Lima, for this reason their levels will not be analyzed.

Minimum		Depression Level				Total
		Mild	Moderate	Severe		
Gender	Male	34 13,5%	39 15,5%	23 9,1%	33 13,1%	129 51,2%
	Female	34 13,5%	25 9,9%	13 5,2%	51 20,2%	123 48,8%
Professional Area	Health Sciences	21 8,3%	14 5,6%	9 3,6%	25 9,9%	69 27,4%
	Basic Science	11 4,4%	8 3,2%	2 0,8%	19 7,5%	40 15,9%
	Engineering	10 4,0%	15 6,0%	10 4,0%	4 1,6%	39 15,5%
	Economics and Management Sciences	10 4,0%	14 5,6%	5 2,0%	11 4,4%	40 15,9%
	Humanities and Social and Legal Sciences	16 6,3%	13 5,2%	10 4,0%	25 9,9%	64 25,4%
Total		68 27,0%	64 25,4%	36 14,3%	84 33,3%	252 100%

Table 3: Depression levels of university students by gender and professional area.

Carranza (2013) established the BDI-IIA levels in university students through the following categories: Minimum (0-6), Mild (7-11), Moderate (12-16) and Severe (17-63). In Table 3 we see that the highest number of students is at a severe level (33.3% of the total). According to gender, there were more females (20.2%) than males (13.1%) with severe depression, and more males (9.1%) than females (5.2%) with moderate depression. By professional area, those presenting the highest percentage of severe depression were students of Health Sciences (9.9%) and Humanities and Legal and Social Sciences (9.9%), as compared with the total.

Analysis of Differences According to Gender and Professional Area

In Table 4, the Kolmogorov-Smirnov (K-S) coefficients obtained significant probabilities (p < .05) in at least one of the groups, which indicates that the scores in this variable do not approach a normal distribution, justifying the use of a non-parametric test for the verification according to gender. The results obtained with the "Mann-Whitney U" (U) transformed to a "Z" distribution indicate that there are no significant differences (p > .05) according to gender in the positive mental health variable.

Variable	Groups	Average	SD	K-S	p	U	Z	p
PMH	Male	121,58	15,729	.086 *	.020	7787,0	-.253 ns	.156
	Female	122,00	17,320	.064 ns	.200			

p > .05 (ns = not significant)
Table 4: Characteristics and significant differences in positive mental health according to gender.

In Table 5, the Kolmogorov-Smirnov (K-S) coefficients obtained non-significant probabilities (p > .05) in four groups with the exception of the Health Sciences group, which indicates that the scores in this variable do not approach normal distribution, justifying the use of a non-parametric test for verification according to professional area. The results obtained with the Kruskal-Wallis test indicate that there are no significant differences (p > .05) according to professional area in the variable positive mental health.

Variable	Groups	Average	SD	K-S	p	X^2	p
PMH	Health Sciences	121,94	18,094	.113*	.028	5,805ns	.214
	Basic Sciences	119,08	16,415	.094	.200		
	Engineering	125,79	11,870	.074	.200		
	Economic and Management Sciences	124,73	18,510	.088	.200		
	Humanities and Legal and Social Sciences	119,03	15,446	.089	.200		

* p < .05
Table 5: Characteristics and significant differences in positive mental health according to professional area.

In Table 6, the Kolmogorov-Smirnov (K-S) coefficients obtained very significant probabilities (p < .001) in both groups, indicating that the scores in this variable are close to a normal distribution, justifying the use of a parametric test for verification according to gender. The results obtained with the "t" of Student" indicate that there are no significant differences (p > .05) according to gender in the variable depression.

Variable	Group	Average	SD	K-S	p	t	p
Depression	Male	12,74	9,529	.143***	.000	-1.717ns	.087
	Female	14,95	10,922	.121***	.000		

*** p < .001
Table 6: Characteristics and significant differences in depression according to gender.

In Table 7, the Kolmogorov-Smirnov (K-S) coefficients obtained significant probabilities (p < .05) in four groups with the exception of the Basic Sciences group, which indicates that the scores in this variable do not approach a normal distribution, justifying the use of a non-parametric test for the verification according to professional area. The results obtained with the Kruskal-Wallis test indicate that there are no significant differences (p > .05) according to

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professional area in the variable depression.

Variable	Group	Average	SD	K-S	p	X²	p
Depression	Health Sciences	14,04	11,159	.119*	.016	5,169ns	.270
	Basic Science	15,20	10,031	.137ns	.056		
	Engineering	10,72	7,207	.171**	.006		
	Economic and Management Sciences	12,95	11,264	.169**	.006		
	Humanities and Legal and Social Sciences	15,16	10,214	.137**	.004		
* p < .05; ** p < .01							

Table 7: Characteristics and significant differences in depression according to professional area.

Analysis of Statistical Normality

According to the results of Table 8, the Kolmogorov-Smirnov coefficient of the variable positive mental health is p > .05 and with respect to the variable depression a p < .05 is observed, which indicates that the data does not present a normal distribution. The Spearman's non-parametric coefficient for the correlation of both variables is used.

	Kolmogorov-Smirnov	Gl.	Sig.
Positive Mental Health	0,045	252	0,200
Depression	0,132	252	0,000

Table 8: Test of normality.

Relationship between Positive Mental Health and Depression

The correlation between the total scores of positive mental health (PMH) and depression (BDI-IIA), present a value of r= -.709 (see Table 9) determining the existence of a statistically significant relationship (p < .01). The negative direction of the correlation indicates that the higher the positive mental health, the lower the depression, and vice versa. The correlations between the total scores of the positive mental health and depression dimensions show the existence of statistically significant relationships (p < .01) in all cases.

Variables	Depression
Personal Satisfaction	-.754**
Prosocial Attitude	-.235**
Self-control	-.588**
Autonomy	-.573**
Problem-solving and Self-actualization	-.552**
Interpersonal Relationship Skills	-.492**
Positive Mental Health	-.709**

** p < .01; N=252

Table 9: Analysis of correlation (Spearman's rho) between positive mental health and depression.

Discussion

The results with respect to the general objective allow us to confirm the existence of a statistically significant relationship, high and negative, between positive mental health and depression (p <.01, r=-.709). The analysis of normality was performed by means of the Kolmogorov-Smirnov coefficient, and a normal distribution of the data was obtained, which justified the use of the non-parametric Spearman coefficient for the correlation between both variables.

Regarding the first specific objective, the reliability of the PMH scale and the BDI-IIA was achieved by the Cronbach's alpha coefficient, and both instruments were found to have good internal consistency (r= .927 - in both cases). The BDI-IIA is slightly higher than that found by Aguirre [28], who found an alpha of . 909, and by Carranza [1] using the Cronbach's alpha technique (r= .878), correlation nones and pairs (r= .803) and two halves (r= .799) but slightly less according to the test-retest technique (r= .996) performed by the same author. As for the PMH scale, the reliability found is slightly higher than that found by Riveros [23], who found a value of .88 for the total scale, and by Anicama et. al. who found a value of .85 using the test-retest method for the same variable. As for the reliability of the six factors of positive mental health, five dimensions present values greater than .70 and only factor 2: Prosocial Attitude presents an alpha of

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.632; this coincides with the findings of Anicama, et al. who obtained an r = .60 in the Prosocial Attitude factor and an r > .70 in the rest of the dimensions [9].

The second objective was to explore the level of depression in university students. 33.3% of the total was found to be at a severe level. With regard to gender, the severe level was more represented by women (20.2%) than by men (13.1%), in accordance with the data provided by the [17]. By professional area, the areas that represented a higher percentage in the severe level were Health Sciences (9.9%) and Humanities and Legal and Social Sciences (9.9%).

The third objective showed that there are no significant differences (p > .05) in both variables, gender and professional area, this is similar to what was found by Anicama, et al. [9] in relation to positive mental health.

The fourth objective was to determine the relationship between the dimensions of positive mental health and depression. Therefore, a correlation analysis of the variables using Spearman's rho was performed, and statistically significant relationships (p < .01) were found in all cases.

Finally, it is important to emphasize the high and negative relationship (r= -709) between positive mental health and depression found in this research, since it empirically validates the theoretical model of well-being (Lluch, Vázquez and Hervás) [4,5] and indicates that the higher the positive mental health the less depression. This serves as a consideration for future prevention/promotion and intervention programs to be carried out in university students at the UNMSM.

Among the limitations of the study are the use of an intentionally small non-probabilistic sample size and not to analyze age and year of study differences. It is recommended to carry out research that relates positive mental health with variables that evaluate illness, in order to confirm or contrast the theory of Jahoda's welfare model in 1958 [4], using a larger number of subjects in the samples.

Conclusions

There is a statistically significant high and negative relationship between positive mental health and depression in university students in Metropolitan Lima.

The PMH scale and the IDB-IIA have high internal consistency.

Most students are at a severe level of depression. By gender, more females than males are severely depressed, and more males than females are moderately depressed.

According to the professional area, students of Health Sciences and Humanities and Legal and Social Sciences represent a higher percentage of students with severe depression than the total.

There are no significant differences according to gender and professional area in the variables positive mental health and depression.

There is a statistically significant relationship between the six factors of positive mental health and depression in the students of the UNMSM.

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