

Positive mental health in Peruvian university students during the COVID 19 pandemic

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Summary

The purpose of the study was to describe the positive mental health of Peruvian university students during the COVID 19 pandemic through the implementation of the Positive Mental Health scale. The same that was applied to 840 university students. The research was framed under the exploratory-descriptive perspective. It was obtained as results that 266 (32%) were male students and 574 (68%) female; the female gender stood out. Due to the COVID 19 pandemic, the positive mental health of university students is located between a very low, low and medium level at 60.6% and 39.4% at a high and very high level. In the same way as the components of mental health such as personal satisfaction, prosocial attitude, self-control, autonomy, problem solving, self-actualization and interpersonal relationship skills; It has also been affected by the COVID 19 pandemic. Therefore, it is concluded that Peruvian university students have been affected in their positive mental health. And it is urgent that private and public universities implement assistance and prevention programs for their students in relation to mental health and psychological support.

Keywords: Positive mental health, university students, COVID 19 pandemic

Introduction

Positive mental health as a state of well-being enables people to cope with daily stress. Likewise, it helps in a productive and positive way in the environment. Performing adequately, appreciating and enjoying life (Toribio et al., 2018); the same that, in the current context, has been affected by the various effects of COVID 19 (Ribot et al., 2022). This pandemic is also known as Severe Acute Respiratory Syndrome - SARS-CoV-2, due to presenting an

infectious picture of acute pneumonia and which was reported in China (Shigemura et al., 2020) ; It also significantly affects the world population, generating consequences for people's health, economy, and social and emotional stability (Lai et al., 2020). These effects have generated measures such as isolation and social distancing and strategies such as virtual education, the suspension of face-to-face work, etc. For their part, health, banking, commerce and security professionals, called frontline, are directly

exposed to being infected with COVID 19 and, above all, their mental health is affected (Rodríguez-Quiroga et al., 2020).

The various restrictions on rights implemented by legislation and political power due to the coronavirus have generated economic, social and health effects on the population (Paúl, 2020 and ECLAC, 2022). So much so that, at the level of Latin America, the mortality due to COVID 19, in Peru, registers a total of 204,323. Achieving to be one of the highest in Latin America according to the statistical report (Minsa, 2022). This situation has generated various sensations in the population, such as fear, uncertainty, isolation, confinement, changing habits and even becoming familiar with remote work, in addition to staying at home in fear of getting infected, getting sick or dying (Ramírez-Ortiz et al., 2020). On the other hand; the loss of a relative or job, the reduction of economic income, the expenses of the daily family basket, and covering educational expenses of the children, etc., have generated the presence of stress, anxiety, depression, conflicts and violence, in the family, work and social environment, all of which affect mental health. Consequently, anxiety is evident in university students due to the health crisis (Saravia-Bartra et al., 2020).

The truth is that the pandemic has once again shown a series of reactions on an emotional level in people. One of the main effects is the excessive fear of uncertainty. On the other hand, behaviors of anguish, recurrence of increased consumption of alcohol, tobacco and antidepressants are observed. Likewise, due to the fear of being infected again, post-traumatic stress, depression, anxiety and somatization (Sureimset al., 2022).

This fact was evidenced in various studies; For example, Canales and Martínez (2021) showed moods and mental health in university students, since 48.3% had an anxious mood; 33.1%, hostile; 18.6%, depressive; 50.7 % reported having poor

mental health. It is concluded that there is a high negative prevalence in mood and that the students presented mental health problems (Canales et al., 2022).

In the educational field, due to the abrupt and sudden implementation of virtual education, university students had to face stress, which began to express itself due to the lack of knowledge of the use of the platforms and the fact that they did not have the experience of using technology as an educational resource by teachers and students (Shah et al., 2021).

In this sense, the challenges faced by university students did not only go through the health issue; but also educational. In which students as teachers had to face virtual education mediated by platforms and technologies; which was mostly forced and poorly planned (Vilela et al., 2021). This fact generated not only stress in university students, but also sleep and anxiety disorders (Armas-Elguera et al., 2021). In many cases, positive, negative and indifference attitudes in relation to virtual education according to the age and sex of the students (Estrada-Araoz et al., 2020) and, in other cases, frustration and university desertion (Cueva, 2020).

Likewise, although the pandemic has negatively affected health and education; in some cases, it has been a means of opportunity. For many university teachers and students, it has allowed them to develop their capacities for self-control, problem solving, academic self-efficacy, self-regulation, etc. In other words, both students and university professors have developed skills related to autonomous learning, self-actualization, and technology-mediated learning (Yupanqui-Lorenzo et al., 2021). The same ones that have helped in the positive mental health of university students and teachers.

In positive mental health, as has been pointed out, factors of a biological, psychological, social and economic nature converge; plus they depend on each other.

Generating a state of well-being in the person (Machorroa and Morenob, 2010). In addition, the cognitive approach has referred that mental health allows the individual to adapt to the demands of the environment (Cuamba Osorio et al., 2020) . In this sense, people develop good mental health, therefore, they are able to develop positive emotions, reorganize their character, calm or face suffering, eliminate the causes and discover or rediscover the meaning and purpose in their lives. Coming to highlight the positive qualities of personality such as: subjective well-being, optimism, happiness and self-determination (Baranov et al., 2020).

When reviewing the various concepts related to mental health, it is evident that they are linked to terms such as fullness, optimism and satisfaction (Warr , 1987) . It is also linked to terms such as psychological well-being, aspirations, autonomy and/or integrated functioning.

Regarding its historical development as a conceptualization; positive mental health; dates from the sixties (Jahoda , 1958) . At that time, the first conceptual foundations were established to treat positive mental health, eventually coming to be considered as part of health from the perspective of prevention and health promotion.

The positive mental health model was established from a multidimensional conception (Jahoda , 1958) . For his part, Jahoda (1958) proposed six general criteria: 1) attitudes towards oneself, which is obtained from daily behavior, based on self-perception and self-concept; 2) growth and self-actualization, which is when what is current is consistent with the meaning of life; 3) integration, which is the ability to see life from the experiences that arise, accepting them as they are positive or negative; 4) the autonomy that the individual has to achieve a relationship with the environment and with his peers, in such a way that his decisions are self- determined independently; 5) perception of the reality of

each individual, analyzing the circumstances objectively, avoiding as far as possible making judgments and being empathetic with the experiences of others and, finally, 6) mastery of the environment, which is related to the success of the achievement to achieve results and adaptation as a way to achieve goals.

Likewise, at the end of the 20th century, a growing development of well-being theories and positive mental health studies was observed (Ryff & Keyes, 1995) . As research has progressed, the difference between positive and negative health has been considered as independent dimensions. Coming to maintain that it responds to a dynamic and multidimensional process (Ryff and Keyes, 1995) . Therefore, three aspects can be distinguished: emotional, subjective and social well-being.

It should also be noted that from empirical studies; There have been important contributions in relation to positive mental health (Llach, 1999) . Positive mental health is considered a state where the individual enjoys well-being and optimal functioning. Linking it with the qualities and potentialities that help the development of the person to enjoy well-being. Therefore, it is argued that positive mental health maximizes the qualities and the development of potentialities in the person to achieve their well-being and optimal functioning.

In this sense, Llach (1999) proposes a conceptual structure and operationalization of positive mental health in six factors: 1) personal satisfaction, which is characterized by being happy with actions, with positive life goals, which strengthen positive self-concept; 2) the prosocial attitude, which are voluntary actions in favor of others; 3) self-control to face stress and conflictive experiences, tolerate anxiety and show emotional balance; 4) autonomy, as the possibility to have their own criteria, with individual security, self-confidence and regulation of their own behavior; 5) the skills to solve problems and self- update to

evaluate experiences, adapting to changes, with the ability to make decisions and with an attitude of development and continuous growth, finally, 6) the ability to relate interpersonally, promoting the ability of relating in a healthy interpersonal way, empathic and providing emotional support to others.

There may be a number of conceptual perspectives regarding positive mental health; however, it should be noted that it is inherent to the biology and psychology of the person, it also contributes to the well-being and fulfillment of the person. In this sense, the university student as a person seeks to have well-being and fulfillment. The same one that has been affected by the pandemic and has been able to experience, directly, the death of a family member due to COVID 19. Living the experience of seeing that their life, their fulfillment and well-being is also exposed to end product of the pandemic. In this sense, there is a need to investigate positive mental health in students with the purpose of collecting, documenting and describing mental health in university students.

Method

The study responds to the descriptive and cross-sectional level, in addition to the quantitative paradigm. For this reason, 840 students from various universities in Peru have been considered as a study sample. Representing 266 (32%) male students and 574 (68%) female. To collect information from the study sample, the Positive Mental

Health (SMP) scale of Lluch (1999) was used, which is made up of 39 items and responds to a multidimensional structure. Its distribution is given in 6 factors: personal satisfaction, prosocial attitudes, self - control, autonomy, problem solving and self-actualization, and interpersonal relationship skills. Since its initial construction, it has had a series of psychometric evidence procedures through content validity to indicate the agreements of the items, the factors and the extension of the instrument; thus, it has also been evaluated through criteria with the GHQ-12 general health test with moderate but satisfactory correlation results. It reports an internal consistency greater than .70 in most of the factors, with the exception of F2 (prosocial attitude), the values oscillate between .71 and .82, with the overall result being .90 (Lluch, 1999). For this case, a content validity was carried out, mainly in the syntax with 5 judges where some items were modified and from these the results improved in their comprehension and, consequently, in their reliability.

The information was collected through the virtual survey through the Google forms form . Coming to share the survey link through E-mail, Facebook, Messenger, WhatsApp, etc. In this sense, the "snowball" method was used until obtaining the necessary amount for the study. Then proceeding to organize the data according to the six factors proposed in the study. Obtaining the results presented below

Results

Table 1

The levels of positive mental health and its components

Positive mental health level	Frequency	%	% Accumulated
very low	177	21.1	21.1

Under	167	19.9	41.0
Medium	165	19.6	60.6
High	172	20.5	81.1
Very high	159	18.9	100.0
Total	840	100.0	
Level of personal satisfaction	Frequency	%	% Accumulated
very low	214	25.5	25.5
Under	172	20.5	46.0
Medium	167	19.9	65.8
High	156	18.6	84.4
Very high	131	15.6	100.0
Total	840	100.0	
Prosocial attitude level	Frequency	%	% Accumulated
very low	229	27.3	27.3
Under	230	27.4	54.6
Medium	143	17.0	71.7
High	141	16.8	88.5
Very high	97	11.5	100.0
Total	840	100.0	
level of self-control	Frequency	%	% Accumulated
very low	214	25.5	25.5
Under	173	20.6	46.1
Medium	200	23.8	69.9
High	133	15.8	85.7
Very high	120	14.3	100.0
Total	840	100.0	
Autonomy level	Frequency	%	% Accumulated
very low	233	27.7	27.7
Under	206	24.5	52.3
Medium	102	12.1	64.4
High	187	22.3	86.7

Very high	112	13.3	100.0
Total	840	100.0	
Troubleshooting and self-updating level	Frequency	%	% Accumulated
very low	174	20.7	20.7
Under	168	20.0	40.7
Medium	227	27.0	67.7
High	121	14.4	82.1
Very high	150	17.9	100.0
Total	840	100.0	
Level of interpersonal relationship skills	Frequency	%	% Accumulated
very low	174	20.7	20.7
Under	198	23.6	44.3
Medium	166	19.8	64.0
High	154	18.3	82.4
Very high	148	17.6	100.0
Total	840	100.0	

The results showed that the level of positive mental health in the perception of the respondents is "very low" with 21.1%; while in "low" with 19.9% and "medium" with 19.6%, so it would be indicated that they are the affected group in terms of their positive mental health. However, another group underlined a "high" level with 20.5% and another highlighted the "very high" level with 18.9%, forming the group of those not affected. The proportions found allowed us to infer that the positive mental health of the students turned out to be located at a very low, low and medium level.

Likewise, the results found for the level of personal satisfaction showed that the evaluated perceptions leaned at the "very low" level with 25.5%, while the "low" with 20.5% and "medium" with 19.9%, becoming

the affected group. In contrast, another group indicated a "high" level with 18.6% and a very high level with 15.6%. The percentages found allowed us to deduce that personal satisfaction was deficient, discovering a very low, low and medium level of personal satisfaction.

Similarly, the results obtained for the level of prosocial attitude indicated that the perceptions of the respondents leaned at the "very low" level with 27.3%, likewise, the "low" level resulted in 27.4% and the "medium" level " with 17.0%, representing the group of those affected. However, another group highlighted the "high" level with 16.8% and another highlighted the "very high" level with 11.5%, making up the group of those not affected. The percentages found allowed us to infer a very low, low and medium level of prosocial attitude.

Similarly, the figures found for the level of self-control indicated that the perceptions of

the respondents were biased at the "very low" level with 25.5%, likewise, "low" with 20.6% and "medium" with 23.8%. , representing the group of those affected. On the contrary, another group insisted on the "high" level with 15.8% and another that considered "very high" with 14.3%, creating the group of those not affected. The percentages found allowed us to deduce that in terms of self-control, a very low, low and medium level was experienced.

Likewise, the results found for the level of autonomy indicated that the perceptions of the respondents were concentrated in the "very low" level with 27.7%, likewise, "low" with 24.5% and "medium" with 12.1%, representing the affected group. On the contrary, another group took refuge in the "high" level with 22.3% and another that considered "very high" with 13.3%, creating the group of those not affected. The located percentages allowed to infer that the level of autonomy experienced a very low, low and medium level.

Similarly, the results obtained for the level of problem solving and self-updating

Table 2

Levels of positive mental health by gender

Sex	Level	Frequency	%	% Accumulated
Feminine	very low	123	21.4	21.4
	Under	123	21.4	42.8
	Medium	109	19.0	61.8
	High	117	20.4	82.2
	Very high	102	17.8	100.0
	Total	574	100.0	
Male	very low	54	20.3	20.3
	Under	44	16.5	36.8
	Medium	56	21.1	57.9

indicated that the perceptions of the respondents leaned at the "very low" level with 20.7%, likewise, the "low" level resulted in 20.0% and the "medium" level with 27.0%, representing the group of those affected. However, another group highlighted the "high" level with 14.4% and another highlighted the "very high" level with 17.9%, making up the group of those not affected. The percentages found allowed us to infer a very low, low and medium level of problem solving and self-updating.

Similarly, the figures found for the level of interpersonal relationship skills indicated that the perceptions of the respondents were biased at the "very low" level with 20.7%, likewise, "low" with 23.6% and "medium" with a 19.8%, representing the group of those affected. On the contrary, another group insisted on the "high" level with 18.3% and another that considered "very high" with 17.6%, creating the group of those not affected. The percentages found allowed us to deduce that in terms of interpersonal relationship skills, a very low, low and medium level was experienced.

	High	55	20.7	78.6
	Very high	57	21.4	100.0
	Total	266	100.0	

In relation to positive mental health by gender, it can be noted that the results found corresponding to the female sex indicated that the perceptions of the respondents leaned both in "very low" with 21.4%, "low" with 21.4%, while than in "medium" with 19.0%, becoming the group affected by the COVID 19 pandemic. However, another group was also found located in the "high" level with 20.4% and another stood out in the "very high" level. high" with 17.8%, representing the group of those not affected. So, the proportions found allowed us to infer that the level of positive mental health according to the female sex was deficient, showing a very low, low and medium level.

Similarly, the figures found corresponding to the male sex indicated that the perceptions of the respondents leaned at the "very low" level with 20.3%, likewise, "low" with 16.5% and "medium" with 21.1%, configuring the group of those affected. On the other hand, another group expressed their perception at the "high" level with 20.7% and another that they considered "very high" with 21.4%, profiling the group of those not affected. Therefore, the percentages found allowed us to deduce that the level of positive mental health according to the male sex was deficient, showing a very low, low and medium level.

Table 3

Levels of positive mental health by place of origin

Place of origin	levels	Frequency	%	% Accumulated
lime	very low	107	21.7	21.7
	Under	88	17.8	39.5
	Medium	99	20.1	59.6
	High	100	20.3	79.9
	Very high	99	20.1	100.0
	Total	493	100	
provinces	very low	70	20.2	20.2
	Under	79	22.8	43.0
	Medium	66	19	62.0
	High	72	20.7	82.7

	Very high	60	17.3	100.0
	Total	347	100	

Regarding the results found in relation to positive mental health by place of origin, the following can be pointed out: the university students of Lima located their answers in relation to mental health that, the perceptions of the respondents leaned "very low" with 21.7%, while in the "low" with 17.8% and in the "medium" with 20.1%, becoming the group affected by the COVID19 pandemic. However, another group located at the "high" level was also found with 20.3% and another stood out at the "very high" level with 20.1%, representing the group of those not affected. Thus, the proportions found allowed us to infer that the level of positive mental health according to place of origin in Lima was deficient, showing a very low, low and medium level.

Similarly, the figures found corresponding to the place of origin: provinces indicated that the perceptions of the respondents leaned at the "very low" level with 20.2%, likewise, "low" with 22.8% and "medium" with a 19.0%, configuring the group of those affected. On the other hand, another group insisted on the "high" level with 20.7% and another that considered "very high" with 17.3%, forming the group of those not affected. Therefore, the percentages found allowed us to infer that the level of positive mental health according to place of origin: provinces was deficient, showing a very low, low and medium level.

Discussion

The results show the existence of a gap of 39.4% from the grouping of the very low, low and medium levels regarding the levels of positive mental health. In the same way, it was found that 34.2% in relation to personal satisfaction; that is, the surveyed students did not feel joy and, on the contrary, they

adopted a negative perspective of life, so they developed a negative self-concept of themselves. Similarly, 28.3% showed a gap in relation to the prosocial attitude, while it was detected that 35.6% corresponds to autonomy. Likewise, for the level of problem solving and self-actualization, the gap considered was 32.3% and, finally, a gap of 36.0% was found for interpersonal relationship skills.

Similarly, the gap of 38.2% was identified in the female sex, while for the male sex it was 42.1%, in relation to positive mental health.

There is no doubt that the context of the COVID 19 pandemic and the confinement measures have generated various problems of a psychological nature regardless of the social or economic context (Wang et al., 2020) . Regardless of age or origin, a gap of 40.4% was identified among university students in Lima. While students from the provinces were affected by 38.0%. Both men and women. presenting low, very low and medium levels in their positive mental health. This indicates that students from both Lima and the provinces have suffered the consequences of COVID 19 in relation to their positive mental health.

Therefore, in general terms, it can be noted that students have been affected in their personal, family and educational well-being, due to daily stress. That is, the students have had difficulties coping with stress and conflictive experiences, showing intolerance to anxiety. Which validates what was found by Ríos et al. (2020) , in whose study he pointed out that the students of Lima; They showed a high level of anger and fear, a product of the confinement decreed by the political and health authorities. Showing that the pandemic brought fear, anxiety, depression, panic and anguish in people and

university students (Vértiz et al. 2020; Arias-Chávez et al. 2021).

From these data, it can be inferred that the performance of the students, in relation to academic activities; where there is responsibility and independence to execute them, it was diminished. As has been pointed out that the technological and psychological restrictions, in the first wave of the COVID 19 pandemic; produced pressure, stress and anxiety in the students. Therefore, in a study carried out, the participants faced with the question about virtual education ended up qualifying it as bad or very bad in 14%, that it had worsened their academic performance by 40%, who showed low self-efficacy in 21%. , who reported having anxiety in 11% and only 14% who were highly motivated to study remotely (Sanz et al., 2020). Which indicates that only a minority , during the COVID 19 pandemic and its lethal consequences on mental health, was able to have a positive self-concept, prosocial attitude, self-control, autonomy, ability to solve problems and self-actualization. As well as the skills to establish interpersonal relationships with empathy and emotional support through virtual education , a condition that would notoriously affect the development of their strategic skills when they carry out their profession (Tito et al. 2020).

Therefore, based on the findings, the need for university authorities to have various intervention and prevention strategies in order to improve the levels of positive mental health in university students emerges. Because there is a gap created by the COVID 19 pandemic in relation to the mental health and emotional development of university students.

conclusion

Regarding positive mental health and the components that characterize it, it can be pointed out that the very low, low and medium levels are the ones that stand out the

most with 60.6%; and 39.4% between high and very high. Proving that the COVID19 pandemic has affected the positive mental health of university students. In the same way as the components of mental health such as personal satisfaction, prosocial attitude, self-control, autonomy, problem solving, self-actualization and interpersonal relationship skills; They have also been affected by the health crisis. Evidencing that there is a need for urgent intervention regarding the positive mental health of university students.

According to positive mental health by gender, it was possible to show that both male and female university students have been affected by the COVID 19 pandemic. Regarding the female sex, a group placed their responses at the very low, low and medium level. , in 61.8% and 39.2% between a high and very high level. And as for male students, 57.9% placed their answers between the very low, low and medium level. And 42.1% placed their answers between a high and very high level. Confirming that the COVID 19 pandemic has affected the positive mental health of both female and male students. There is an urgent need to assist students by implementing preventive intervention programs regarding mental health.

According to the positive mental health by place of origin of the university students: Lima and provinces, the students of Lima, who represent the urban area, express that their positive mental health placed their responses at a very low, low and medium level, in 59.6% and 40.4% between a high and very high level. As for the students from the provinces, 62% placed their answers between the very low, low and medium level. And 38% placed their answers between a high and very high level. Confirming that the COVID 19 pandemic has affected the positive mental health of provincial students such as Lima. There is evidence that students from both Lima and

the provinces need to be cared for in terms of their positive mental health.

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