

# Satisfaction with Life and its Relationship with Mental Health in University Professors

Djamila Gallegos-Espinoza<sup>1</sup>, Carlos LaRosa-Longobardi<sup>1</sup>, Livia Piñas-Rivera<sup>1</sup>, Lucía Asencios-Trujillo<sup>1</sup>, Lida Asencios-Trujillo<sup>1</sup>, Hernan Matta-Solis<sup>2,\*</sup>

<sup>1</sup> Universidad Nacional de Educación Enrique Guzmán y Valle, Lima, Perú

<sup>2</sup> TIC Research Center: eHealth & eEducation, Instituto Peruano de Salud Familiar, Lima, Perú

## Abstract

**Introduction:** The satisfaction with the life in university professors will have an important value for the personal evaluation of themselves on the quality of their own experiences and in addition to a well-being of personal feeling.

**Aim:** to determine Satisfaction with life and its relationship with mental health in professors of a university in North Lima.

**Methods:** a quantitative, descriptive and cross-sectional study, with a population of 270 older adults, who answered a questionnaire of sociodemographic aspects and the scale of satisfaction with life.

**Results:** 54 (20%) of the older adults were dissatisfied with life, 32 (11.9%) slightly dissatisfied, 39 (14.4%) are neutral with respect to life satisfaction, 84 (31.1%) are satisfied, and 50 (18.5%) are very satisfied.

**Conclusions:** educational talks should be held for the elderly, where the experience of positive emotions during that stage of life continues to be promoted and allows them to have a better satisfaction with their lives.

**Keywords:** Personal satisfaction, Mental health, Aged, Social factors.

Received on 11 December 2022, accepted on 22 August 2023, published on 6 September 2023

Copyright © 2023 Gallegos-Espinoza *et al.*, licensed to EAI. This is an open access article distributed under the terms of the [CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/), which permits copying, redistributing, remixing, transformation, and building upon the material in any medium so long as the original work is properly cited.

doi: 10.4108/eetpht.9.3934

\*Corresponding author. Email: [hermanmatta@gmail.com](mailto:hermanmatta@gmail.com)

## 1. Introduction

Older adults are considered as a group of people who, in the contemporary world, constitute a growing population with special needs, related to the great advances in science and technology, especially the promotion of health sciences, where the increase in population aging is a challenge for the world and governments are required to pay more attention to this group [1]. However, it is often difficult to achieve higher levels of life satisfaction as age and physical and psychological problems increase [2].

Given that the impact of this situation is evident in the different spheres of life in society at the economic, socio-political, cultural, educational or welfare level, as well as in the media, it becomes an opportunity to transform social policies and improve the quality of life in university professors [3].

It is estimated that, by 2020, according to the World Health Organization, the number of people aged 60 or over will be higher than that of children under five years of age, increasingly requiring a comprehensive approach, which includes all spheres of health, including the psychological aspect which is given by the life satisfaction perceived by older people [4]. Consequently,

older adults during the COVID-19 pandemic have had their physical and emotional health affected by factors directly associated with infection such as the increased risk of morbidity and mortality; and by indirect factors such as loneliness, isolation, dependence, violence, discrimination and lack of access to basic food and health services [5].

Given the context of the COVID-19 pandemic, it is relevant to know new findings about the variables under study in an adult population in general, unlike the other life cycles, they are exposed to various changes as part of their maturity and independence. Social, family and work demands and responsibilities are beginning to be greater. Personal, emotional, social, economic difficulties, parenthood, unemployment, retirement, health problems, the appearance of new diseases and even death are some of these demands [6].

Defining well-being as the subjective component of quality of life. Life satisfaction represents the cognitive dimension of well-being that results from a balance between expectations and achievements. And happiness constitutes the affective dimension of well-being, and at the same time a subjective indicator of quality of life [7]. Considering that life satisfaction is considered a subjective concept that evaluates several areas, including health, psychological, and social in the lives of older people, it could be an indispensable part of successful aging [8].

Social distancing measures sought to contain the spread of infection, prioritizing the prevention and management of COVID-19 cases, but other health needs that affected the quality of life of people, especially the most vulnerable were neglected [9].

In North America, a study conducted in Mexico to 235 older adults indicated that in relation to satisfaction, 53% said they were highly satisfied, 20% satisfied and 9% slightly satisfied. It is evident that most patients report that if they had to live a new life they would not change almost anything; On the contrary, the item where they expressed the least satisfaction was "in most senses of my life it comes close to my ideal" [10].

In Africa, a study conducted in northeastern Ethiopia to 816 older adults indicated that the level of satisfaction with life was: dissatisfied 17.2%, moderately satisfied 63.8% and well satisfied 19.0%, showing that the level of satisfaction with life in our study group was lower than in some more developed countries [11].

In Asia, a study conducted in Iran of 679 older adults in the city of Qom revealed that 91.8% were illiterate and/or with low educational level, of which 41.8% had low life satisfaction, 54.2% had average life satisfaction and 4% had high life satisfaction. Therefore, to increase the level of life satisfaction in university professors, it is suggested to promote social support, health status and cognitive status [12].

A study in Ecuador conducted in 3 provinces to 682 older adults indicating that in satisfaction with quality of life they delivered a single factor that explains 72.46% of their total variance, revealing that older adults improve

their satisfaction with quality of life as an adequate perception of the current economic situation is maintained, There is no poor perception of health, greater importance is assigned to the family and there is a considerable number of resources related to food factor that explains 68.92% of its total variance [13].

In Chile, a study in southern Chile of 101 older adults showing that they are satisfied with their lives, presenting a higher level of agreement that their life in many aspects is close to their ideal (70%), if they could live their life again they would not change anything (65%), their living conditions are excellent (64%), They are satisfied with their life (57%) and have so far obtained the important things they have wanted in their life (56%) [14].

Therefore, the research objective is to determine the satisfaction with life and its relationship with mental health in professors of a university in North Lima..

## 2. Methods

### A. Research type and Design

According to the properties of the research is quantitative of non-experimental descriptive cross-sectional methodology [15].

### B. Population

The total population is made up of 270 inhabitants of the district in North Lima.

### C. Inclusion Criteria

- Participants residing more than 1 year in the district
- Participants over 30 years old.
- Participants who agree to voluntarily participate in the study

### D. Technique and Instrument

The data collection technique was the survey, in which sociodemographic data and the data collection instrument the Life Satisfaction Scale (SWLS) are evidenced.

The SWLS comprises 5 items distributed one-dimensionally, in which they are valued on a Likert-type scale with 5 response options: "1 = strongly disagree", "2 = disagree", "3 = neutral", "4 = agree", "5 = strongly agree", obtaining a score that would range from 5 to 25 points. Therefore, the higher the score, the greater the satisfaction with life in university professors at a university in North Lima [16][17].

### E. Place and Application of the Instrument

For the collection of data, coordination had to be made with the members of each household to be able to carry out the study, in turn, they were provided with information about what is going to be done and thus have the knowledge about the research.

## 3. Results

In Figure 1, it can be seen that , 4.1% (n=11) of the participants are extremely dissatisfied with their life, 20% (n=54) are dissatisfied with life, 11.9% (n=32) are slightly dissatisfied with life, 14.4% (n=39) are neutral with respect to life satisfaction, 31.1% (n=84) are satisfied with their life and 18.5% (n=50) are very satisfied with their life.

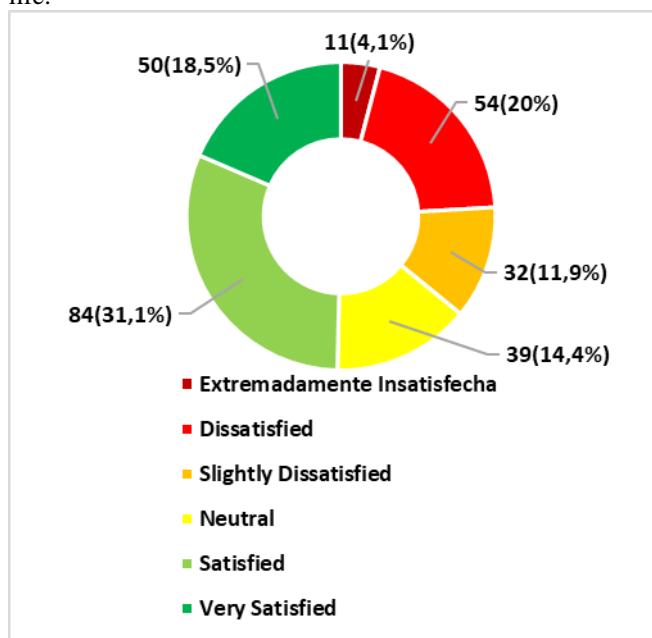


Figure 1. Satisfaction with life and its relationship with mental health in professors of a university in North Lima.

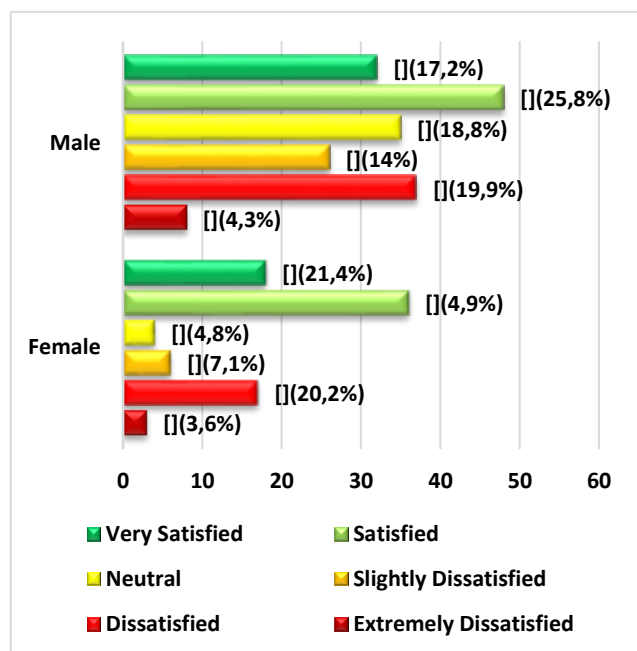


Figure 2. Satisfaction with life in relation to sex in professors of a university in North Lima.

In Figure 2, it can be seen that, in relation to sex, in the male sex, 17.2% (n=32) are very satisfied with life, 25.8% (n=48) are satisfied with life, 18.8% (n=35) are neutral with respect to life satisfaction, 14% (n=26) are slightly dissatisfied with life, 19.9% (n=37) are dissatisfied with life and 4.3% (n=8) are extremely dissatisfied with life; and as for the female sex, 21.4% (n=18) are very satisfied with life, 4.9% (n=36) are satisfied with life, 4.8% (n=4) are neutral with respect to life satisfaction, 7.1% (n=6) are slightly dissatisfied with life, 20.2% (n=17) are dissatisfied with life and 3.6% (n=3) are extremely dissatisfied with life.

#### 4. Discussion

In the present study, it has been covered from the aspect of mental health of the elderly, since satisfaction with life is one of the ways in which the older adult feels comfortable with the extrinsic or intrinsic environment that surrounds him [18-26].

As for the results of satisfaction with life, older adults are very satisfied with their lives, this is because older adults are in full peace, tranquility, be cared for by their family, and that their family as the main source of emotional support, care, security and affection allows their quality of life to be very satisfied [27-30]. Since the mental and social health of the elderly allows the independence and autonomy of the same, providing not only the abilities to solve needs for it, but also to feel comfortable with the life that has led to reach the third age [31-37], therefore their well-being of physical, mental and social health are in full harmony, given that in all that time elapsed he has managed to cope with negative effects that did not allow him to improve his quality of life [38-42].

Although one of the important strategies for teachers to have a good satisfaction with life and mental health, is the use of information and communication technologies (ICTs) [43-49], since it influences the teacher in several aspects; facilitation at work, as it simplifies management activities and helps reduce stress and improve job satisfaction [50-53]; Access to educational resources, allows the teacher access to different resources according to their educational line, which allows them to improve their teaching method and in turn reduces stress [54-57]. Although the use of ICTs in teachers, has an important impact on their satisfaction with life and mental health, both positively and negatively as the time is spent using the teacher, since the excess to it also causes negative effects on mental health, so ICTs are essential in teachers as long as it is balanced and aware so that it obtains benefits in their welfare [58-60].

#### 5. Conclusions

It is concluded that educational talks should be held for older adults, promoting the experience of positive

emotions during that stage of life that can improve the satisfaction of their life.

It is concluded that strategies should be carried out that allow the elderly to maintain their emotional and social well-being, in which their satisfaction with life is positive.

## References

- [1] Sourour Y, et al. Hospital morbidity among elderly in the region of Sfax, Tunisia: Epidemiological profile and chronological trends between 2003 and 2015. *Clin Epidemiol Glob Heal*. 2019 Mar;7(1):131-135. doi: 10.1016/j.cegh.2018.09.002.
- [2] Papi S, Karimi Z, Zilae M, Shahry P. Malnutrition and Its Relation to General Health and Multimorbidity in the Older People. *J Holist Nurs Midwifery*. 2019;29(4):228-235. doi: 10.32598/JHNM.29.4.228.
- [3] Gil H. Poverty in the bureaucratic labyrinth. *Cuad Trab Soc*. 2020 Jun;33(2):427-428. doi: 10.5209/cuts.68005.
- [4] Adakawa MI. D-Space, makerspace, and hackerspace in cyberspace: Cybersecurity strategies for digital preservation of library resources in the post-Covid-19 pandemic. *Advanced Notes in Information Science* 2022;1:59-89. <https://doi.org/10.47909/anis.978-9916-9760-0-5.98>.
- [5] Altamirano JLM, López ÁGR. MicroARN para la detección temprana de diabetes mellitus tipo 2: revisión bibliográfica. *Salud, Ciencia y Tecnología* 2023;3:507-507. <https://doi.org/10.56294/saludcyt2023507>.
- [6] Bianchi M, Romano L. Evaluación de la efectividad de programas de educación nutricional en la lucha contra la malnutrición infantil en áreas urbanas marginalizadas. *Community and Interculturality in Dialogue* 2022;1:4-4. <https://doi.org/10.56294/cid20234>.
- [7] Cabrera YR, Aroche HP, Tamargo YC, Martínez MD. Caracterización clínica-epidemiológica de la catarata en mayores de 60 años. *Salud, Ciencia y Tecnología - Serie de Conferencias* 2022;1:260-260. <https://doi.org/10.56294/sctconf2022260>.
- [8] Cano C, Castillo V. Mapping the structure of knowledge about Community and Home Care. *Community and Interculturality in Dialogue* 2022;2.
- [9] Cano C, Castillo V. Unveiling the Thematic Landscape of Cultural Studies Through Bibliometric Analysis. *Community and Interculturality in Dialogue* 2022;2.
- [10] Castro KJG, García MB, Ropain NPV. Levels of technological competence in the use of social networks among teachers in Santa Marta. *Metaverse Basic and Applied Research* 2023;2:27-27. <https://doi.org/10.56294/mr202327>.
- [11] Chanes DV, Rivera PN. The importance of social ties in obtaining employment. *AWARI* 2022;3. <https://doi.org/10.47909/awari.155>.
- [12] World Health Organization. According to a WHO global survey, 90% of countries have experienced disruptions to their essential health services since the onset of the COVID-19 pandemic [Internet]. WHO; 2022 [cited 2022 Dec 31]. Available from: <https://www.who.int/es/news/item/31-08-2020-in-who-global-pulse-survey-90-of-countries-report-disruptions-to-essential-health-services-since-covid-19-pandemic>.
- [13] De Cruz M, Banerjee D. "An invisible human rights crisis': The marginalization in university professors during the COVID-19 pandemic – An advocacy review." *Psychiatry Res*. 2020 Oct;292:1-10. doi: 10.1016/j.psychres.2020.113369.
- [14] De la Serna J. *Psychological Aspects of COVID-19*. 1st ed. Tektime; 2020.
- [15] Mikulic I, Crespi M, Caballero R. Escala de Satisfacción con la Tektimeida (SWLS): Estudio de las Propiedades Psicométricas en Adultos de Buenos Aires. *Anu Investigate*. 2019;26(1):395-402. Accessed 2022 Dec 31. Available from: <https://www.redalyc.org/journal/3691/369163433043/html/>.
- [16] Chibas-Muñoz EE, Aguila ECS, Alvarez PEQ, Landrove-Escalona E, Bandera RC. Factores epidemiológicos que influyen en la estadía hospitalaria de pacientes con diagnóstico de Diabetes Mellitus. *Salud, Ciencia y Tecnología - Serie de Conferencias* 2022;1:7-7. <https://doi.org/10.56294/sctconf20227>.
- [17] Damasceno FS, Vitorino EV. Digital humanities indexed in DOAJ: An analysis of scientific publications. *Advanced Notes in Information Science* 2023;3:1-21. <https://doi.org/10.47909/anis.978-9916-9906-1-2.44>.
- [18] Fleitas LAV, Herrera MD, Junco OM, Borrego YM, Borges YG. Eficacia del tratamiento aplicado en la consulta de cesación tabáquica. *Interdisciplinary Rehabilitation / Rehabilitacion Interdisciplinaria* 2022;2:16-16. <https://doi.org/10.56294/ri202216>.
- [19] Geliz VS, Pérez LG, Prieto YC, Cruz LMP, Vergara ND. Conocimientos de las gestantes sobre las implicaciones del sobrepeso y la obesidad durante el embarazo. *Salud, Ciencia y Tecnología - Serie de Conferencias* 2022;1:267-267. <https://doi.org/10.56294/sctconf2022267>.
- [20] Ginarte MJG, Landrove-Escalona EA, Moreno-Cubela FJ, Yano RT del. Visibilidad e impacto de la producción científica sobre enseñanza aprendizaje de los pares craneales publicada en Scopus. *Data and Metadata* 2022;1:4-4. <https://doi.org/10.56294/dm20224>.
- [21] Guzmán YCGC, Morejón EH, Cajiga M del JG, González YR, Sánchez SG. Comportamiento clínico epidemiológico de la Insuficiencia Renal Crónica en pacientes diabéticos. La Palma, 2022. *Salud, Ciencia y Tecnología - Serie de Conferencias* 2022;1:234-234. <https://doi.org/10.56294/sctconf2022234>.
- [22] Jacho KEE, Paez M del PS. Apoyo social percibido en pacientes con Diabetes Mellitus. *Salud, Ciencia y Tecnología* 2022;2:84-84. <https://doi.org/10.56294/saludcyt202284>.
- [23] Jiménez-Franco LE, Rosa CD de la, Guardado YA. Transforming Scientific Events with Information Management: The Case of the Virtual Health Convention Center. *Data and Metadata* 2022;1:15-15. <https://doi.org/10.56294/dm202215>.
- [24] Kars T, Deliktas T. A study on the relationship between perceptions of successful aging and life satisfaction of Turkish elderly people. *Perspect Psychiatr Care*. 2020 Apr;56(2):386-392. doi: 10.1111/ppc.12446.
- [25] Mesa C, Franco O, Gómez C, Abel T. COVID-19: The forgotten priorities of the pandemic. *Maturitas*. 2020 Jun;136:38-41. doi: 10.1016/j.maturitas.2020.04.004.
- [26] Garcia A, Camacho A. Satisfaction with life in the elderly in the Family Medicine Unit No. 53 of León; Gto. (Mexico) [Internet]. *Rev Medica y Enferm Ocronos*. 2020 [cited 2022 Dec 31]. Available from: <https://revistamedica.com/satisfaccion-vida-adulto-mayor/>.
- [27] Sewunet H, Lindgren H, Geda B, Azale T, Erlandsson K. Satisfaction with life and associated factors among elderly

- people living in two cities in northwest Ethiopia: A community-based cross-sectional study. *BMJ Open*. 2022 Sep;12(9):1-14. doi: 10.1136/bmjopen-2022-061931.
- [28] Larrosa JMC, Galgano F, Gutiérrez E. Kinship network evolution in Argentina. An exploration based on online data. *AWARI* 2022;3. <https://doi.org/10.47909/awari.150>.
- [29] Lascano IA, Acurio EV, López JH, García DM, Jiménez EA, Sevilla VC. Asociación del nivel de estrés con el desarrollo del síndrome metabólico en el personal de salud. *Salud, Ciencia y Tecnología* 2023;3:386-386. <https://doi.org/10.56294/saludcyt2023386>.
- [30] López-Belmonte J, Pozo-Sánchez S, Moreno-Guerrero A-J, Marín-Marín J-A. We've reached the GOAL. Teaching Methodology for Transforming Learning in the METAVERSE. A teaching innovation project. *Metaverse Basic and Applied Research* 2023;2:30-30. <https://doi.org/10.56294/mr202330>.
- [31] Martínez SM, Tobón ST, Gonzales-Sánchez A del C, López-Quesada G, Romero-Carazas R. Training projects, Virtual Education and Pandemic by COVID-19: from opportunity analysis to strategic decision making. *Data and Metadata* 2022;1:40-40. <https://doi.org/10.56294/dm202278>.
- [32] Mascarenhas HAD, Dias TMR, Dias PM. Adoption of Network Analysis Techniques to Understand the Training Process in Brazil. *AWARI* 2020;1:e004-e004. <https://doi.org/10.47909/awari.63>.
- [33] Miranda AIG, Campo MCV, Serra JLG, López YV, Falcón YP. Discapacidad y funcionalidad de los adultos mayores. *Interdisciplinary Rehabilitation / Rehabilitacion Interdisciplinaria* 2022;2:11-11. <https://doi.org/10.56294/ri202211>.
- [34] Montesino DC, Reguera IP, Fernández OR, Relova MR, Valladares WC. Caracterización clínica y epidemiológicamente de la discapacidad en la población adulta mayor. *Interdisciplinary Rehabilitation / Rehabilitacion Interdisciplinaria* 2022;2:15-15. <https://doi.org/10.56294/ri202215>.
- [35] Niazoa J, Pérez-Galavís A, Ron M, Rodríguez-Martínez C, Cardoza W. Teleworking and Health in Times of Pandemic from the Perception of the Administrative Staff of a Pharmacy. *Data and Metadata* 2022;1:23-23. <https://doi.org/10.56294/dm202263>.
- [36] Daddy S, Cheraghi M. Multiple factors associated with life satisfaction in older adults. *Prz Menopauzalny*. 2021;20(2):65-71. doi: 10.5114/pm.2021.107025.
- [37] Arévalo D, Game C, Padilla C, Wong N. Predictors of satisfaction with quality of life in older adults in Ecuador [Internet]. *Rev Espac*. 2020 [cited 2022 Dec 31]. Available from: <https://www.revistaespacios.com/a20v41n12/a20v41n11p10.pdf>.
- [38] Tito YMG, López LNQ, Gamboa AJP. Metaverse and education: a complex space for the next educational revolution. *Metaverse Basic and Applied Research* 2023;2:56-56. <https://doi.org/10.56294/mr202356>.
- [39] Torres TL. Intervención educativa sobre factores de riesgo desencadenantes de la angina de pecho. *Interdisciplinary Rehabilitation / Rehabilitacion Interdisciplinaria* 2021;1:4-4. <https://doi.org/10.56294/ri20214>.
- [40] Trujillo DM, Argos C de la CZ, Izquierdo AIV, Mesa IG, Zamora AL. Caracterización de la capacidad funcional en Adultos Mayores. *Interdisciplinary Rehabilitation / Rehabilitacion Interdisciplinaria* 2022;2:17-17. <https://doi.org/10.56294/ri202217>.
- [41] Xammar YEB, Djament L. Is the SCRIPT an useful tool to assess clinical reasoning ability in medical students? *Data and Metadata* 2022;1:25-25. <https://doi.org/10.56294/dm202257>.
- [42] Navarro R, Denegri M, Peñaloza V. Life satisfaction and financial capabilities in older adults with active aging: an exploratory study in southern Chile. *InterSedes*. 2020 Apr;21(43):57-77. doi: 10.15517/isucr.v21i43.41977.
- [43] Oliva M, Sandes ES, Romero S. Application of social network analysis to the institutional relations of the Higher Education System in the Rivera region-Livramento. *AWARI* 2022;3. <https://doi.org/10.47909/awari.157>.
- [44] Oloriz MAG, Beltrán CR, Sánchez CMC. Trends in health telematics and telemedicine services. *Data and Metadata* 2022;1:16-16. <https://doi.org/10.56294/dm202216>.
- [45] Ortíz Y de la CL, Mejico DC, Cabrera YMMCYMM, Gonzalez YQ, Pedroso MS. Bajo peso al nacer y factores de riesgo maternos asociados. *Policlínico Pedro Borrás. Salud, Ciencia y Tecnología - Serie de Conferencias* 2022;1:257-257. <https://doi.org/10.56294/sctconf2022257>.
- [46] Pérez A, Ricci L, Daniel 'Rossi, Cruz LM. Impacto de la telemedicina en el acceso a la atención de salud mental en zonas rurales aisladas. *Community and Interculturality in Dialogue* 2022;1:3-3. <https://doi.org/10.56294/cid20233>.
- [47] Rocha ES, Araújo RF. Rapid scientific communication in times of pandemic: the attention of pre-prints online about Covid-19. *Advanced Notes in Information Science* 2022;2:103-11. <https://doi.org/10.47909/anis.978-9916-9760-3-6.114>.
- [48] Rodríguez L, Martínez S. Impacto de la educación en la salud materna en comunidades rurales: un estudio de caso. *Community and Interculturality in Dialogue* 2022;1:1-1. <https://doi.org/10.56294/cid20231>.
- [49] Ruiz AGU, Suquilanda WAH, Espinoza HME, Torres ZKS. Incidencia de Diabetes Mellitus tipo 2 en el puesto de salud de la Parroquia Tres Cerritos en adultos. Periodo agosto 2019 – agosto 2022. *Salud, Ciencia y Tecnología* 2023;3:358-358. <https://doi.org/10.56294/saludcyt2023358>.
- [50] Fernández C, Baptista P. Research Methodology. 2015 [Internet]. Available from: <http://observatorio.epacartagena.gov.co/wp-content/uploads/2017/08/metodologia-de-la-investigacion-sexta-edicion.compressed.pdf>.
- [51] Emmons R, Larsen R, Grifo S. The Satisfaction With Life Scale. *J Pers Assess*. 1985;49(1):71-75. Available from: [https://www.tandfonline.com/doi/abs/10.1207/s15327752jpa4901\\_13](https://www.tandfonline.com/doi/abs/10.1207/s15327752jpa4901_13).
- [52] Samuel AM, Garcia-Constantino M. User-centred prototype to support wellbeing and isolation of software developers using smartwatches. *Advanced Notes in Information Science* 2022;1:140-51. <https://doi.org/10.47909/anis.978-9916-9760-0-5.125>.
- [53] Sánchez CMC, León LAG, Yanes RCA, Oloriz MAG. Metaverse: the future of medicine in a virtual world. *Metaverse Basic and Applied Research* 2022;1:4-4. <https://doi.org/10.56294/mr20224>.
- [54] Sánchez RM. Transformando la educación online: el impacto de la gamificación en la formación del profesorado en un entorno universitario. *Metaverse Basic and Applied Research* 2023;2:47-47. <https://doi.org/10.56294/mr202347>.
- [55] Schlogl G de F, Dutra ML. Correlations between Information Science research groups in Brazil: an approach based on keywords. *AWARI* 2020;1:e006-e006. <https://doi.org/10.47909/awari.69>.

- [56] Sebo TAR, Oentarto ASA, Situmorang DDB. "Counseling-Verse": A Survey of Young Adults from Faith-Based Educational Institution on the Implementation of Future Mental Health Services in the Metaverse. *Metaverse Basic and Applied Research* 2023;2:42-42. <https://doi.org/10.56294/mr202342>.
- [57] Silva LF da, Padilha RC. Digital technologies as potentiating tools in the dissemination of information in museum spaces: Impact of the Covid-19 pandemic on museums. *Advanced Notes in Information Science* 2023;3:156-84. <https://doi.org/10.47909/anis.978-9916-9906-1-2.41>.
- [58] Siranaula GMF, Rosales CGC, Sarez CMT. Rol de la vitamina D en pacientes con diabetes mellitus tipo 2. *Salud, Ciencia y Tecnología* 2022;2:202-202. <https://doi.org/10.56294/saludcyt2022202>.
- [59] Tacuri ABG, Pérez GPL. Hospitalización prevenible en enfermedades crónico degenerativas: hipertensión arterial y diabetes. *Salud, Ciencia y Tecnología* 2023;3:487-487. <https://doi.org/10.56294/saludcyt2023487>.
- [60] Calderón G, Lozano F, Cantuarias A, Ibarra L. Validation of the Life Satisfaction Scale in Peruvian Workers. *Lib Rev Peru Psychol.* 2018;24(2):249-264. doi: 10.24265/liberabit.2018.v24N2.06.