PalArch's Journal of Archaeology of Egypt / Egyptology

BODY PERCUSSION AND VIOLENCE: EFFECTS OF A MUSIC THERAPY-BASED PROGRAM ON PSYCHOLOGICAL WELL-BEING

¹Fernández Mantilla Mirtha Mercedes, ²Flores Ledesma Katia Ninoska, ³Tula Espinoza-Moreno, ⁴Carlos Paiva Zapata. ⁵Menacho Rivera Alejandro Sabino, ⁶Lovaton Huillca, Laime

¹Master in University Teaching, Doctor of Education, Associate Professor, César Vallejo University -Trujillo, Peru <u>mfernandez@ucv.edu</u>,

²Master's in public management, Degree in Education, EESPP Emilia Barcia Boniffatti, International Research and Development Centre -CIID knfledesma@hotmail.com,

³Magister en Ciencias de la Educación, Docente principal de la Facultad de Medicina de la Universidad Nacional Mayor de San Marcos-Lima, Perú. tespinozam@unmsm.edu.pe,

⁴Licenciado en psicología, Proyecto de Promoción para la Investigación Peruana (PPIP).

Trujillo -Perú, carlospaiva07@outlook.es,

5 Docente de Postgrado de la Universidad Cesar Vallejo, Trujillo, Perú.

alejandro.131071@hotmail.com

⁶Ministerio de Defensa, Orcid. Marcoaurelioagosto2011@gmail.com

Fernández Mantilla Mirtha Mercedes, Flores Ledesma Katia Ninoska, Tula Espinoza-Moreno, Carlos Paiva Zapata. Menacho Rivera Alejandro Sabino, Lovaton Huillca, Jaime-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(8), 348-359. ISSN 1567-214x

Keywords: percussion, body, music therapy, well-being, psychological.

ABSTRACT

Objective: The present investigation aimed to determine the effects of a body percussion program on the psychological well-being of women victims of violence in Trujillo. Materials and methods: pre-experimental study, with a sample of 21 women referred from an NGO in the El Milagro district, Trujillo, using the Carol Ryff Psychological Well-being Scale, and the "Warmi" Body Percussion and Music Therapy Program of Degrees and Paiva (2019). Results: The results obtained show that the applied program significantly improved the psychological well-being of women victims of violence in the city of Trujillo. In addition, at the level of dimensions, the study showed that there were

statistically significant differences between the pre and post-test, in the area of Self-concept. The rest of the dimensions showed differences, but not significant. Conclusions: The "Warmi" body percussion program significantly improves the psychological well-being of women victims of violence in the city of Trujillo.

INTRODUCTION

Violence against women (CMV) of the 21st century has become an increasingly notorious and uncomfortable problem for Peruvian societies, at levels of an invisible epidemic^{1.} In just 6 years, the numbers have managed to double, with a significant 68% of Peruvian women still claiming to have been assaulted in some way by their partner, father, brother, or any other close relative^{2.} It is also worrying that the cost of CMV is not only focused on women, but affects all family members equally^{3.}

And, despite not being an exclusive topic of mental health, psychology in the Latin American region has proposed many advances, regarding the need to lower these figures, and get a way to prevent it⁴. From this, the need arose to see CMV from more than theoretical points, studying it from fully pragmatic clinical fields, affordable to any mental health professional, concerned with collaborating on the task of eradicating this psychophysical phenomenon⁵. Increasing thus, the number and diversity of forms of approach, which have not only focused on primary care, but have seen countless tasks in the various psychosocial areas of people affected by this problem, and their close friends⁶.

In this sense, and despite the still insufficient analysis of the effectiveness of the various approaches to intervention, the tendency to do science to test these benefits and disadvantages, through programmes and controlled approaches in populations affected by MVC⁷, has grown. This is advantageous, to the extent that increasingly effective prevention and intervention measures can be achieved, with faster results, and with durability over time; allowing mental health professionals to be more prepared, and victims and affected, to quickly solve their needs⁸.

What is known about the effects of CMV, from moderate physical damage to serious psychopathological conditions, is vast; which could often be summed up in well-being ^{9.} Theories state that this study variable, purports to describe the state of healthin which the body and mind of victims ¹⁰ are located In this sense, it is important to emphasize that psychological well-being should remain a focus of interest for those aiming to address CMV. This research emphasizes this, since it is a variable that allows to address generically the effects of violence, seeking to measure mainly the mental state of the person about their situation of affectation; however, there is no need to study as well, the specific symptoms developed from an episode of CMV, since it could also provide satisfactory results for the objective of eradicating this phenomenon, from modern societies.

Thus, from the countless list of intervention models, they stand out as very attractive to the consulting population and to their needs, those with alternatives a little out of the environment of the red armchair of the

therapist¹¹. For these years of many technological advances, it is unthinkable that psychology has treatment alternatives such as logotherapy, biodanza and music therapy; intervention programs or approaches potentially different from classic psychotherapy. Alternatives that not only have evidence in their favor, but also very good expectations of the scientific community¹².

This study has a theoretical justification, because it provides empirical data for the formulation of future theories that study body percussion and its benefits as a tool of psychology; has practical justification, since it represents a background of guidance for future programs that seek to do research in music therapy; and social justification, as it addresses an urgent problem of attention, both in Peru and in the world. Thus, the general objective of research is to demonstrate the effects of a body percussion program (music therapy), on the psychological well-being of women victims of violence.

There are many studies describing the positive and beneficial effects of music therapy on various consultation grounds; patients with cancer¹³ with severe and moderate stress problems¹⁴, in patients with severe mental diagnoses such aspsychosis¹⁵; even in the face of physical problems has shown satisfactory results in motor development¹⁶. Similarly, body percussion has been shown to be effective in addictions¹⁷, in academic and social adaptationproblems¹⁸, among others.

The same is true of patients who are victims of violence. For example, Fernandez 19's work a pilot study in which he measured the variables Self-Esteem, Stress and Depression, finding significant improvements, as well as differences between pre and postest measures, demonstrating that a music therapy program is effective in VDV women. Later, Fernández²⁰ with a systematic review in which he found evidence of improvements in various variables such as well-being, self-esteem, satisfaction, quality of life, among others, from the application of music therapy as the main tool of approach. In addition, Annesley 21's qualitative work mentioning the benefits for professionals and women victims of violence, which brings with it the use of such programs. Finally, Guerrero²² who demonstrates that music therapy contributes to increase various levels of variables affected by CMV.

METHODS

This work is an applied research, of pre-experimental type²³, since an analysis of the effect of an independent variable on another dependent was performed over a given period. This, taking two measures of the dependent variable (before and after the application of the program), without making use of a control group, seeking to demonstrate the effectiveness of the body percussion program "Warmi", in the psychological well-being of women victims of violence (VDV). In such a way that:

G: O1 - X - O2

O1: Carol Riff Psychological Welfare Scale pretest in VDV

Women

X: Body percussion program "Warmi"

O2: Carol Riff Psychological Welfare Scale post-stress in VDV Women

Description of variables

Thus, the independent variable is: the "Warmi" Body Percussion Program; and the dependent variable is: the well-being of VDV women.

Population, sample, and sampling

For the study, a population of women belonging to the El Milagro district of Trujillo city, in the department of La Libertad, Peru, was worked on. The data suggest that by 2019, the number of women victims of violence would exceed 26348 cases in the La Libertad² department alone due to a growing trend. In this sense, the work of Rooms²⁴ suggest that pre-experimental work with human populations, is more effective, if you work with between 15 and 30 people.

Therefore, following these guidelines, a sample of 21 VDV women was worked on; and, referred to by Otzen and Manterola²⁵ sampling was non-probabilistic consecutively, receiving cases that reported violence to the institution that supported them so that they could work with these women consecutively until they obtained the expected total.

This exhibition was composed of women between 25 and 60 years of age, with full primary education, domiciled in some district of Trujillo, native Spanish language, victims of violence affected in the last year before the program was carried out. For this reason, VDV women with severe or moderate injuries or who had a disability or difficulty that prevented them from performing the work carried out in the session were excluded; as well as cases of reciprocal violence or with a recurring history of violence of at least 5 years (and/or criminal history), in the same way as patients from some psychotherapeutic treatment or attendees of a similar orientation program.

Instruments

Body percussion program "Warmi"

It is a program to address violence, which aims to significantly improve well-being, using body percussion and music therapy techniques. It was built by Grades and Paiva²⁶ in the Spanish language, and consists of 12 sessions of a time limit of 2.5 hours. It has a validity of content obtained by judgement, with a score of 1.90 V from Aiken. In addition, it is of group application, and has a reach of adult women from 20 to 65 years of age.

Carol Ryff Psychological Welfare Scale

Scale developed by Ryff and Keyes²⁷ in the English language originally aims to determine the level of that variable across a scale. It consists of 35 items, with a time limit of 25 minutes; it is individual and group application, requires minimal primary schooling, and has a reach of adults of both sexes. Gonzalez, Quintero, Veray and Rosario²⁸ mention that the scale has an internal consistency reliability of .80 average for subscales, and .94 for the overall scale. The authors also mention very good global and comparative adjustment indices, in the confirmatory factor analysis, so it also coincides with an internal structure validity.

Data analysis method

The descriptive statistics were first described, showing the results and comparisons of the results of the pre and postests. The Shapiro-Wilk normality test was then enhanced due to its suitability in samples less than 50 people. Finally, Student's "t" coefficient was found to identify the variation of the two measures (before and after) in a parametric group of data²⁹.

Ethical aspects

This research was developed, following the universal parameters of bioethics in human research, as described by Hungler³⁰ complying with voluntary participation processes, with justice, charity, confidentiality, and respect for the integrity of the participant. For this reason, informed consent was used, in which participants expressed in writing their willingness to join the study group.

RESULTS

The following section describes the results. For this, an analysis was first made of the descriptive results of the pre and postests of the Psychological Welfare Scale in the sample, which are shown in Table 1.

Table 1. Pre and postest by dimensions psychological welfare scale

	Psychological well-being						
Levels	Pretest		Postest				
	Amount	Percentage	Amount	Percentage			
Under	0	0 %	0	0 %			
Middle	10	48 %	3	14 %			
High	11	52 %	18	80 %			
Total	21	100 %	21	100 %			
Levels	Self						
Under	0	0 %	0	0 %			
Middle	10	48 %	5	24 %			
High	11	52 %	16	76 %			
Total	21	100 %	21	100 %			

Levels	Positive relationships						
Under	3	14 %	2	10 %			
Middle	10	48 %	7	33 %			
High	8	38 %	12	57 %			
Total	21	100 %	21	100 %			
Levels	Autonom	y					
Under	3	14 %	1	5 %			
Middle	10	48 %	8	38 %			
High	8	38 %	12	57 %			
Total	21	100 %	21	100 %			
Levels	Environn	ent dominance					
Under	1	5 %	0	0 %			
Middle	6	29 %	6	29 %			
High	14	67 %	15	71 %			
Total	21	100 %	21	100 %			
Levels	Purpose o	f life					
Under	0	0 %	0	0 %			
Middle	12	57 %	2	10 %			
High	9	42 %	19	90 %			
Total	21	100 %	21	100 %			
Levels	Personal growth						
Under	0	0 %	0	0 %			
Middle	3	14 %	2	10 %			
High	18	86 %	19	90 %			
Total	21	100 %	21	100 %			

Note. Source: Data collection Excel database.

Whatever you see in table 1, is the difference between the measurements before and after the body percussion program has been applied. As for the Overall Scale, a 28% change can be observed between the two measures, representing an increase in the level of psychological well-being in women victims of violence, following the implementation of the programmed.

The same goes for dimensions, where there were significant percentage changes between pre and postest, which means that the program significantly improved all dimensions of the participants' psychological well-being. The dimensions on which the most impact was observed were Self-Concept, and Life Purpose, with 24 and 48% extra score at the end of the program.

In determining the levels scored in the pre and postest, the normality of the data was determined, with the aim of choosing the appropriate test, and thus finding the measure of the effect. What can be seen in Table 2.

Table 2: Normality test

Measures	Kolmogoro	v-Smir	nov	Shapiro-Wilk			
Measures	Statistical	gl	Sig.	Statistical	gl	Sig.	
Pretest - postest	.135	21	.200	.957	21	.465	

Note. Source: SPSS-25 statistical program.

What is seen in Table 2 is consistent with Flores, Miranda and Villasís^{29,} which suggests that normality must be verified, in order to choose between a parametric or non-parametric test. This, considering that the most suitable test for small samples (n<35) is the Shapiro-Wilk test. So:

If P-value $\geq \alpha$, $H_{0 \text{ is accepted}}$ — The data matches a normal distribution.

If P-value $< \alpha$, $H_{1 \text{ is accepted}}$ — The data does not match a normal distribution.

In this sense, the results show that P>0.05, so the null hypothesis is accepted, accepting that the data coincide with a normal distribution. Thus, the Student parametric t-test was used (Table 3).

Table 3: Test t for differences in measures

	Matched differences							
Maggurag	95% confidence interval of the difference							
Measures	Media	Deviation	Lower	Superior	t	gl	Sig. (bilateral)	
Prestes – postest of the General Psychological Welfare Scale	-7.190	14.851	- 13.951	430	-2.219	20	.038	

Note. Source: SPSS-25 statistical program

Student's t parametric test was applied to determine the effects of the body percussion program on the psychological well-being of women victims of Trujillo violence. The value for the differences between the pre and postest of the general scale can be seen in Table 3: t (20) - -2,219; p < 0.05. This contains sufficient evidence to reject the null hypothesis, accepting the hypothesis raised in this investigation:

H_{1:} Body percussion program significantly improves psychological well-being of women victims of violence in Trujillo city

However, an additional analysis is made with respect to the differences between pre- and post-stress dimensions, which can be seen in Table 4.

Table 4: Student's t-test for differences in measures

	Matched differences							
Measures	95% confidence interval of the difference							
Wieasures	Media	Deviation	Lower	Superior	T	gl	Sig. (bilateral)	
Prestes - postest	2.238	3.986	-4.053	424	- 2.573	20	.018	

EE.			

dimension							
Self-concept							
Prestes -							
postest of							
the Positive	762	4.312	-2.725	1.201	810	20	.428
Relations							
dimension							
Prestes -							
postest	-	3.209	-2.461	.461	-	20	.169
dimension	1.000	3.20	2.101	.101	1.428	20	.10)
Autonomy							
Prestes -							
postest of							
the	-	3.651	-2.995	.329	-	20	.110
Environment	1.333				1.673		
Domain							
dimension							
Prestes -							
postest of	_				_		
the Purpose	1.524	3.868	-3.285	.237	1.805	20	.086
of Life					-7000		
dimension							
Prestes -							
postest of							
the Personal	333	1.880	-1.189	.522	813	20	.426
Growth							
dimension							

Note. Source: SPSS-25 statistical program

Unlike the above, Table 4 shows that, in a more specific analysis, the dimensions involved in psychological well-being are only denoted differences in pre and postest in Self-Concept (t (20) - -2,573; p < 0.05). In the other dimensions, the differences were percentage ally observable, but no statistically significant difference could be determined. That is, differences between pre and postest were found in all dimensions, but only in the Auto conception dimension could a significant difference be demonstrated.

DISCUSSION AND CONCLUSIONS

Then, following the overall objective of this study, it was determined, through statistical analysis, that the Warmi body percussion program significantly increases the psychological well-being of women victims of violence. This, as we observed in the previous studies of Fernandez^{19,} Fernandez^{20,} Annesley^{21,} and Guerrero^{22.} Also, the findings coincide with the assumptions reviewed in the theoretical framework, of works such as Romero, Crespo, Cárdenas, Pons, and Carretero^{17,} and Fernández and Cardoso^{18,} who supported the effectiveness of music therapy and body percussion programs, in variables such as well-being and in the improvement of the areas close to it.

The body percussion program "Warmi" significantly improves the psychological well-being of women victims of violence in the city of Trujillo. However, the dimensions of psychological well-being did not have significant differences in themselves, except for Self-Concept (t (20) - 2,573; p < 0.05). In that sense. It is recommended to do specific studies in the other variables, as well as reinforce them, and study the possibility of using the program with goals related to self-esteem and self-concept.

THANKS

We would like to thank Dr. Julissa Alvarado Castillo, a teacher and psychologist who gave us her tireless support and accompaniment, in the implementation of the Warmi program.

REFERENCES

- Kohrt BK, Barrueco S, Pérez CP. Domestic violence as a threat to maternal and child well-being in an urban migrant community in Peru. Rev Panam Public Health [Internet]. 2015[cited December 23, 2020];37(4):265–72. Available in: https://iris.paho.org/bitstream/handle/10665.2/8265/v37n4-5a12.pdf?sequence=1&isAllowed=y
- National Institute of Statistics and Informatics. Peru: indicators of family and sexual violence, 2012 2019. Peru, 2019. 19 p. [Internet]. [Cited December 23, 2020]. Available in: https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digit_ales/Est/Lib1686/libro.pdf
- Vargas, MH. Violence against women inflicted by their partner and their relationship to the mental health of adolescent children. Rev Med Hered [Internet]. 2017 [cited 23 December 2020]; 28: 48-58. Available in: http://www.scielo.org.pe/pdf/rmh/v28n1/a09v28n1.pdf
- Silva, MS.; Lisbon, RD.; Cruz, SM. and Becker, VL. Strategies for identifying and coping with intimate partner violence in pregnant women. Rev. Gaucho Enferm. [Internet]. 2017 [Cited 23 December 2020]; 38(3): e67593. Available in: https://www.scielo.br/scielo.php?script=sci arttext&pid=S1983-14472017000300405&lang=es
- Sagot, M. Strategies for tacking violence against women: feminist reflections from Latin America. Digital Athena [Internet]. 2008 [Cited 23 December 2020], 14: 215-228. Available in: https://www.redalyc.org/pdf/537/53701413.pdf
- Yugueros, GA. Intervention with Women Victims of Gender-Based Violence: Educate and Report to Prevent. History of Latin American Education Magazine [Internet]. 2015 [Cited December 23, 2020]; 17(24):191-216. Available in:https://www.redalyc.org/pdf/869/86938947010.pdf
- Andrade, SK.; Pereira, SJ.; Perez, TA. And Cantera, El. Routes and collisions in the work of care for women victims of violence in Spain. Psychological Science [Internet]. 2019 [Cited 23 December 2020]; 13(2): 209-222. Available

- in: http://www.scielo.edu.uy/scielo.php?script=sci_arttext&pid=S16 88-42212019000200209&lang=es
- Castañón, PB. Intervention against gender-based violence from a feminist perspective to women and therapists. Gender issues: equality and difference [Internet]. 2008 [Cited 23 December 2020]; 3:347-366. Recovered
 - from:https://dialnet.unirioja.es/servlet/articulo?codigo=3345614&orden=0&info=link
- Camargo, MD.; Pad, PM.; Severi, CF. meloni, go. Construction of guidelines to guide institutional actions in cases of gender violence at the university. Interface [Internet]. 2019 [Cited 23 December 2020]; 23: E180653. Available in: https://www.scielo.br/scielo.php?script=sci arttext&pid=S1414-32832019000100406&lang=es
- Alcántara, MV.; López, SC.; Castro, M. and Lopez, JJ. Psychological alterations in minors exposed to gender-based violence: prevalence and gender and age differences. Anal. Psychol. [Internet]. 2013 [Cited 23 December 2020]; 29(3): 741-747. Available in: http://scielo.isciii.es/scielo.php?script=sci arttext&pid=S0212-97282013000300013&lang=es
- Oslé, RR. Music therapy and psychotherapy. Advances in relational mental health [Internet]. 2011 [Cited 23 December 2020]; 10(2); 2-10. Available in: https://dialnet.unirioja.es/servlet/articulo?codigo=6340772&orden=0&info=link
- Kusy, P. The possibilities of music therapy in the context of integrated psychotherapy/Knobloch. Journal of Research in Music Therapy [Internet]. 2019 [Cited December 23, 2020]; 3(1): 149-155. Available in: https://dialnet.unirioja.es/servlet/articulo?codigo=7523565&orden=0&info=link
- Kievisiene, J.; Jautakyte, R.; Rauckiene, A.; Fatkulina N. y Agostinis, A. The Effect of Art Therapy and Music Therapy on Breast Cancer Patients: What We Know and What We Need to Find Out--A Systematic Review. Evidence Based Complementary and Alternative Medicine [Internet]. 2019 [Cited December 23, 2020]; 1: 1-14. Available in:https://www.hindawi.com/journals/ecam/2020/7390321/
- From Cunto TG.; Borba C J.; Figueiredo NM. and Dantas EE. Impact of a music therapy program on the stress level of health professionals. Rev. Bras. They're sick. [Internet]. 2013 [Cited 23 December 2020]; 66(3): 385-390. Retrieved from: https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672013000300013&lng=pt&tlng=pt
- Castilla, PR. Effects of group music therapy on psychotropic adherence in adults with psychotic disorders. Psychiatric and Psychological Act of Latin America [Internet]. 2019 [Cited December 23, 2020]; 65(1); 54-64. Available in: https://www.researchgate.net/profile/Ruby_Castilla-Puentes/publication/332446435 Group Music Therapy Managing

- Adherence to Psychotropics in Adults with Psychotic Disorder s/links/5cb5e67ba6fdcc1d499a1660/Group-Music-Therapy-Managing-Adherence-to-Psychotropics-in-Adults-with-Psychotic-Disorders.pdf
- Cañabate, OD.; Ten, DS.; Rodriguez, CD. and Zagalaz, ML. Body percussion as an instrument to improve motor agility. Educatio XXI Century [Internet]. 2017 [Cited December 23, 2020]; 35(2). 229-252. Available in: https://revistas.um.es/educatio/article/download/298591/214251/1025941
- Romero, NF.; Crespo, CN.; Cardenas, LA.; Pons, TJ. and Carretero, MA.

 Drugs and Body Percussion: Rehabilitation Therapy Using the BAPNE Method. Proceedings Social and Behavioral Sciences [Internet]. 2015 [Cited December 23, 2020]; 152:1128-1132. Available

 at: https://www.researchgate.net/publication/275544209_Drugs_and_Body_Percussion_Rehabilitation_Therapy_Using_the_BAPNE_Method
- Fernandez, BJ. and Cardoso, FJ. Music therapy and social integration into juvenile offenders: a case study. Educational Profiles [Internet]. 2016 [Cited December 23, 2020]; 38(152): 163-180. Available in: http://www.scielo.org.mx/pdf/peredu/v38n152/0185-2698-peredu-38-152-00163.pdf
- Fernandez, DT. Study of anxiety before and after the application of music therapy in violent women of Cuba and Mexico. Comparison and cultural perspectives. Academic Integration in Psychology [Internet]. 2015 [Cited December 23, 2020]; 3(8): 64-75. Available in: http://integracion-academica.org/attachments/article/98/07%20Musicoterapia%20-%20TFern%C3%A1ndez.pdf
- Fernandez, DT. Music therapy for women survivors of abuse: an intercultural experience from a feminist perspective. The arts in psychotherapy [Internet]. 2016 [Cited December 23, 2020]; 48: 19-27.

 Available in: https://www.sciencedirect.com/science/article/abs/pii/S01974556
 15300137?via%3Dihub
- Annesley, L. Music therapy within an integrated project for families exposed to domestic violence: A qualitative study of professionals' perspectives. British Journal of Music Therapy [Internet]. 2018 [Cited December 23, 2020]; 32(2): 96-104. Available in: https://journals.sagepub.com/doi/abs/10.1177/135945751880528
- Guerrero, VE. Self-esteem, Music Therapy and Gender Violence. A group meeting from the multimodal approach. Journal of Research in Music Therapy [Internet]. 2019 [Cited December 23, 2020]; 3(2): 1-20. Available in:https://revistas.uam.es/rim/article/view/rim2019_3_001
- Montero, I and Leon, GO. A guide for naming research studies in Psychology. International Journal of Clinical and Health Psychology

- [Internet]. 2007 [Cited 23 December 2020]; 7(3): 847-862. Recovered from: https://www.redalyc.org/pdf/337/33770318.pdf
- Rooms, BE. Pre-experimental designs in psychology and education: a conceptual review. Liberabit. Journal of Psychology [Internet]. 2013 [Cited December 23, 2020]; 19(1): 133-141. Available in:https://www.redalyc.org/pdf/686/68627456011.pdf
- Otzen, T. and Manterola, C. Sampling techniques on a study population. Int. J. Morphol. [Internet], 2017 [Cited23 December 2020]; 35(1): 227-232. Recovered from: https://scielo.conicyt.cl/pdf/ijmorphol/v35n1/art37.pdf
- Degrees, PY. and Paiva, ZC. Effects of the "Warmi" program on the psychological well-being of women victims of violence Trujillo [Bachelor's Thesis]. Trujillo-Peru: César Vallejo University. 2018. 69p.
- Ryff, DC. and Keyes, LC. The Structure of Psychological Well-Being Revisited. Journal of Personality and Social Psychology [Internet]. 1995 [Cited 23 December 2020]; 69(4): 719-727. Available in: https://www.researchgate.net/publication/15726128 The Structure of Psychological Well-Being Revisited
- Gonzalez, RJ.; Quintero, JN.; Veray, AJ. and Rosario, RA. Adaptation and Validation of Ryff's Psychological Welfare Scale in a Puerto Rican Adult Sample. Positive Psychology and Welfare Psychology [Internet]. 2016 [CitedDecember 23, 2020]: 3(1): 1-14. Recovered from: https://www.researchgate.net/publication/311965604 Adaptac ion y Validacion de la Escala de Bienestar Psicologico de Ryf fen una Muestra de Adultos Puertorriquenos
- Flowers, RE.; Miranda NM. and Villasís, KM. Research protocol VI: how to choose the right statistical test. Inferential statistics. Rev Alerg Mex. [Internet]. 2017 [Cited 23 December 2020]; 64(3): 364-370. Available in: http://sad531fcf28439d24.jimcontent.com/download/version/1456792368/module/13034380529/name/VARIABLES%20E%20INDICADORES.pdf
- Hungler, BP. Scientific Research in Health Sciences. Vol. 1. 6th ed. Mexico: McGraw Hill, 2000.