

Level of Resilience and Family Functionality in Adolescents of two Educational Institutions of a Vulnerable Area in Lima Province

Rosa Perez-Siguas¹, Hernan Matta-Solis¹, Eduardo Matta-Solis¹, Melissa Yauri-Machaca², Anika Remuzgo-Artezano³, Lourdes Matta-Zamudio⁴

¹*Research and Intellectual Creativity Direction, Universidad María Auxiliadora, Lima, 15408, Perú*

²*Research and Technology Direction, BM Tech, Lima, 15408, Perú*

³*Faculty of Health Sciences, Universidad María Auxiliadora, Lima, 15408, Perú*

⁴*Health Sciences, Instituto Peruano de Salud Familiar, Lima, 15408, Perú*

ARTICLE INFO

Article history:

Received: 04 August, 2020

Accepted: 28 October, 2020

Online: 20 November, 2020

Keywords:

Resilience

Family

Adolescent

Family functionality

ABSTRACT

Family functionality is when the family meets the needs of its members, especially adolescents. Resilience is the adolescent's ability to face situations in which there are difficulties, life problems and thus be able to overcome them. The purpose of the study is to determine the Level of Resilience and Family Functionality in Adolescents of two Educational Institutions of a Vulnerable Area in Lima Province. It is a non-experimental study, descriptive of a quantitative approach, it is a cross-sectional correlational investigation, with a population of 204 adolescents, also demographic data and the resilience scale (CD-RISC) and family APGAR. In the results regarding to the level of resilience and family functionality, adolescents present a mild family dysfunction with a medium level of resilience (58.0%), in comparison of the Educational Institutions, in both cases, the majority of students are located in the medium level of resilience, in the case of students from Honorio Manrique Nicho school 48.5% and in the case of students from the Andrés Avelino Cáceres school 54.2%. It is recommended in these institutions to carry out activities that promote the social formation of the adolescent, since this will allow them to communicate with society and the environment.

1. Introduction

Family plays a fundamental role in the adolescent, since it is an influential factor for the relationship with society [1]. One of the stages where one seeks to find changes in society is adolescence, adolescents try to know each other better and also seek difference from themselves with other family members, this process that the adolescent does is a change abruptly, but it is the way in which they will become autonomous and independent people, this process has passed all the members of the family [2].

Family functionality is understood when the family meets the needs of its members, especially adolescents, since it is a stage where there are differentiated changes with other family members

and also adapt to situations of change [3]. So, a family is considered functional when it is able to look for solutions to any problem, so that it does not affect the satisfaction that family members have, including the adolescent [4].

Resilience is understood as the adolescent's ability to face situations in which there are difficulties, life problems and thus be able to overcome them [5]. Resilience is very important for adolescents, because it will allow them to adapt and recover from adversities of the problem so that it continues projecting itself in its future [6].

In [7], the author from Portugal presented that it was evidenced that adolescent males are those who have higher levels of resilience compared to adolescent females; in the self-

*Corresponding Author: Rosa Perez-Siguas, Mrs., +51 1 996826968 & rosa.perez@uma.edu.pe

www.astesj.com

<https://dx.doi.org/10.25046/aj050648>

confidence component, males obtained a score of 35.08% and in the relationship with peers, 26.28%.

In [8], carried out in Taiwan, the author mentioned that in children and adolescents, it was found that there is a risk of family dysfunction where approximately 40% of families have accumulated family risk due to family stress that occurs within their home and also 30% of the mothers have low levels of education or health problems. Lastly, around 7% of the participants, children or adolescents, come from large families that have 4 or more children living in a home.

In [9], carried out in South Korea, the author described that it was found that family dysfunction related to domestic violence and parental addiction was related to smartphone addiction, it was found that the observed association between family dysfunction and Smartphone addiction was not significant in adolescents with self-control or high friendship quality, therefore, adolescents exposed to domestic violence or with addicted parents had a higher probability of smartphone addiction, but had high self-control or friendship quality that could protect them.

The objective of the study is to determine the level of family resilience and functionality in adolescents from two educational institutions of a vulnerable area in Lima Province, in which it will allow to observe what is the level of adolescent resilience and family functionality. This study is important since it will give relevant and real data about family resilience and functionality as adolescents enter a stage of sudden changes where they seek solutions, where they can adapt and manage the situation in the most appropriate way.

In the study, the data collection instrument Connor-Davidson Resilience Scale (CD-RISC) and Gabriel Smilkstein's Family APGAR were applied, which have been useful to assess the level of resilience and family functionality of adolescents from the secondary level of educational institutions. The data collection was processed through the survey of adolescents from educational institutions, the data to be entered was performed in a data matrix that will be designed in the statistical program SPSS (Statistical Package for the Social Sciences) in its version 24.0, in which it will allow a better data processing to make statistical tables so that they can be described and interpreted in results and discussions, respectively.

The research work is structured as follows: In section II, the development of the data collection process of each nursing student will be presented, as well as the guidelines to consider so that they are in the research work. In section III, the results will show the level of resilience and family functionality of adolescents according to the specified dimensions of the instruments in the measurement of the variables. In section IV, we present the discussions and conclusions of the research work.

2. Methods

In this section, the type and design of the research will be developed, as well as the population that will be carried out in the research work, the inclusion and exclusion criteria will be explained in detail, and finally the technique and the instrument for collecting data.

2.1. Research type and design

The present research work is non-experimental, descriptive of a quantitative approach, it is a correlational research [10].

2.2. Population

The population is made up of 204 adolescents from the two educational institutions.

Inclusion criteria:

- Adolescents who normally attend the educational institution.
- Adolescents who have informed consent and assent.
- Adolescents who have the authorization signed by their parents and agree to voluntarily join the study.

Exclusion criteria:

- Adolescents who do not regularly attend to the educational institution.
- Adolescents who do not have the authorization of their parents.

2.3. Technique and Instrument

The technique used is the survey, using the questionnaire or data collection instrument (CD-RISC) and Family APGAR which aims to measure the level of family resilience and functionality in adolescents from two educational institutions of a vulnerable area in Lima Province.

The Connor - Davidson Resilience Scale (CD-RISC) was built by Connor and Davidson in the United States in 2003. Its application is for the adolescent and adult population from 11 to 80 years old, the scale evaluates the following dimensions: Persistence-tenacity-self-efficiency (8 items); Control under pressure (7 items); Adaptability and Ability to Recover (5 items); Control and purpose (3 items) and Spirituality (2 items). It consists of 25 structured items, on a summative Likert scale where 0 "absolutely", 1 "rarely", 2 "sometimes", 3 "often" and 4 "almost always". The scale range goes from 0 to 100, the higher score means more resilience [11].

The family APGAR was designed by Gabriel Smilkstein in 1978 at the University of Washington, it evaluates the following dimensions: adaptation, participation, resources, affectivity and capacity, it consists of 5 items structured on a summative Likert scale where 0 "never", 1 "almost never", 2 "sometimes", 3 "almost always" and 4 "always". The range is from 0 to 20, the higher the score mean greater the family functionality [1].

2.4. Place and Application of the Instrument

The questionnaire was carried out to measure the level of family resilience and functionality in adolescents, it was carried out at the educational institutions Andres Avelino Caceres and Honorio Manrique Nicho.

First, the necessary permissions for research are carried out, coordinated with the directors of both educational institutions to carry out the surveys, then, the permission to each classroom teacher explaining about the survey and why the research work is being carried out to they have knowledge about what is going to be done.

Table 1: Resilience level in adolescent students of both Educational Institutions of Lima Province (N=204)

		Resilience Score				
		Count	%	Mean	Minimum	Maximum
Resilience Dimension (grouped)	Low	46	22,5%	52,28	32,00	60,00
	Medium	105	51,5%	70,28	61,00	79,00
	High	53	26,0%	85,75	80,00	95,00
	Total	204	100,0%	70,24	32,00	95,00

Table 2: Family functionality of adolescent students of both Educational Institutions of a Vulnerable Area in Lima Province (N = 204)

		Family Functionality Score				
		Count	%	Mean	Minimum	Maximum
Family Functionality Dimension (grouped)	Family dysfunction	10	4,9%	7,10	2,00	9,00
	Moderate family dysfunction	29	14,2%	11,90	10,00	13,00
	Mild family dysfunction	100	49,0%	15,59	14,00	17,00
	Good family function	65	31,9%	19,15	18,00	20,00
	Total	204	100,0%	15,78	2,00	20,00

The questionnaire was carried out in consecutive shifts during the morning, at the same time as the adolescents from these institutions, the questionnaire was taken to the adolescents with an approximate time of 25 minutes in each section of secondary level (according to the inclusion and exclusion criteria) in the research work, concluding with good satisfaction when collecting the questionnaires as the adolescents supported our research.

It is important to emphasize the presence of the teacher from each surveyed classroom and the medical staff at the time of filling questionnaire of the adolescent, since most of them showed signs of having a health problem, because both educational institutions are in an area where they are exposed to natural or anthropogenic events where the probability of an event that puts adolescents in educational institutions at risk can happen and also the damage can be considerable.

3. Results and Discussions

The following tables from the surveys carried out following the guidelines corresponding to the research work will be shown in table 1.

In Table 1, the level of resilience in adolescents of both Educational Institutions of a Vulnerable Area in Lima Province, it can be seen that of the 204 adolescents surveyed, 105 (51.5%) of adolescents present a medium level of resilience, followed by 53 (26.0%) of the adolescents present a high level of resilience and lastly 46 (22.5%) of the adolescents present a low level of resilience.

In Table 2, the family functionality of the adolescents of both Educational Institutions of a Vulnerable Area in Lima Province, it can be seen that of the 204 adolescents, 100 (49%) of the adolescents present a mild family dysfunction, followed by 65 (31.9 %) adolescents present a good family function, 29 (14.2%) of the adolescents present a moderate family dysfunction and 10 (4.9%) of the adolescents present a family dysfunction.

Table 3 shows that adolescents with good family function have a high level of resilience (49.22%), adolescents with mild family dysfunction have a medium level of resilience (58.0%), adolescents with a moderate family dysfunction has a medium level of resilience (55.2%) and adolescents with family dysfunction have a low level of resilience (60.0%).

To determine the level of resilience and family functionality, the non-parametric Person's chi-square test was applied, which reported an $X^2 = 44.842$ and a p-value = 0.000 per 1 indicating that there is a significant relationship between these variables.

In Table 4, both cases, most students are located at the medium level of resilience, in the case of students from Honorio Manrique Nicho, 48.5%, and in the case of students from the Andrés Avelino Cáceres school, 54.2%. So, students with a high level of resilience are located at the Honorio Manrique Nicho school with 30.9% compared to students from Andrés Avelino Cáceres who are only 21.5%.

Both studies with the results of the research work can interpret that the levels of resilience and family functionality in adolescents

Table 3: Relationship between Resilience and Family Functionality in adolescent students of both Educational Institutions of a Vulnerable Area in Lima Province (N = 204)

		Resilience Dimension (grouped)							
		Low		Mild		High		Total	
		Count	%	Count	%	Count	%	Count	%
Family Functionality Dimension (grouped)	Family dysfunction	6	60,0%	4	40,0%	0	0,0%	10	100,0%
	Moderate family dysfunction	13	44,8%	16	55,2%	0	0,0%	29	100,0%
	Mild family dysfunction	21	21,0%	58	58,0%	21	21,0%	100	100,0%
	Good family function	6	9,2%	27	41,5%	32	49,2%	65	100,0%
	Total	46	22,5%	105	51,5%	53	26,0%	204	100,0%
Pearson's chi-square tests									
Family Functionality Dimension (grouped)	Chi-square	44,842							
	df	6							
	Sig.	,000*							

Results are based on nonempty rows and columns in each innermost sub table.

*The chi-square statistic is significant at the .05 level.

Table 4: Comparison of Resilience Level of adolescent students between both Educational Institutions of a Vulnerable Area in Lima Province (N = 204)

		Evaluated School					
		Honorio Manrique Nicho		Andrés Avelino Cáceres		Total	
		Count	%	Count	%	Count	%
Resilience Dimension (grouped)	Low	20	20,6%	26	24,3%	46	22,5%
	Medium	47	48,5%	58	54,2%	105	51,5%
	High	30	30,9%	23	21,5%	53	26,0%
	Total	97	100,0%	107	100,0%	204	100,0%

are linked to the promotion of mental and family health of adolescents, taking into account that resilience is very relevant because it allows adolescents to have the ability to adapt and also in making decisions about the negative situations that arise. It also focuses on family functionality because in the adolescent, it will allow it to maintain an affective interaction with the members of its family, and also to have the ability to make changes in order to overcome the difficulties that arise in the family. It is vitally important to have a high level of resilience and, have good family functionality since the development of adolescents must be observed, since there is little knowledge about the topics which

allows us to obtain a review of the scientific information related to the topic.

In the present study, the issue of level of family resilience and functionality is raised from the point of view of promoting adolescent health, which seeks to contribute to educational institutions as part of adolescent training, which it seeks to include programs that allow adolescents to find ways to enhance their adaptation capacities and make their own decisions, both in society and family, so that they can improve their lives in the future.

In the level of resilience in adolescents from educational institutions, the medium level predominated, followed by the high and low. These results can be based on how adolescents live with their parents sharing their own experiences, in which it is a factor that favors the adolescent since it allows them to easily excel and overcome any anticipated problem. In the study by Sulimani Y. [12], on the results of resilience, he referred to the adolescent's distinction between formal and informal social ties and, also, the ability to seek help and guidance from adult figures, as well as strong relationships and supporting parents and family members is a debatable factor as a major component of resilience for adolescents.

In relation to family functionality in adolescents from Cajatambo educational institutions, mild family dysfunction predominated, this is due to the lack of empathy, understanding and sensitivity towards the adolescent by the family is scarce, where scenes such as intra-family conflicts and parental misbehavior are reflected in the adolescent adapting to such actions, allowing the adolescent to think that this normally happens in all other families. Suarez P. and collaborators [2], argue that the development of values and actions of adolescents will be reflected in the role played by the family in their environment, factors such as care, affectivity and fluid communication are criteria that support the adolescent development.

In relation to the level of resilience and family functionality in adolescents from Cajatambo's educational institutions, mild family dysfunction predominated with a medium level of resilience, it is important to emphasize the intervention of the family in the development of resilience in adolescents, since it is mainly the parents who will help build the adolescent's resilience by providing the necessary support that will allow them to overcome certain obstacles. The family will influence positively or negatively in the construction of the adolescent's own resilience, but some adolescents mostly present a high resilience. Tian L. et al. [13], mention that parental support was more strongly related to adolescent resilience, and that interventions should be made to promote adolescent resilience with greater emphasis on parental support in the future of their children.

In comparison the level of resilience between the two Educational Institutions in Lima Province, it can be seen that in the Honorio Manrique Nicho Educational Institution and in the Andres Avelino Caceres Educational Institute, the middle level predominates more, this is because after the family as Resilience builder is also the school, at school the adolescents experiences certain conditions that make them promote resilience, because the school also has the capacity to build it in the adolescent. The way in which resilience can be built is based on the trust that the adolescent has in front of the parents, teachers or friends that generate security to solve any obstacle without doubts.

It is concluded that the particular way in which adolescent education is carried out, whether in the family or at school, should be taken into account; it could be investigated about resilience and family function through other studies to determine this study in greater depth.

Conflicts of Interest

The authors declare that they have no conflict of interest.

References

- [1] L. Higueta-Gutiérrez, J. Cardona-Arias, "Percepción de funcionalidad familiar en adolescentes escolarizados en instituciones educativas públicas de Medellín (Colombia), 2014," *Revista CES Psicología*, **9**(2), 167–178, 2016, doi:10.21615/cesp.9.2.11.
- [2] P. Suárez, M. Vélez, "El papel de la familia en el desarrollo social del niño: una mirada desde la afectividad, la comunicación familiar y estilos de educación parental," *Revista Psicoespacios*, **12**(20), 173–198, 2018.
- [3] D. Paternina, M. Pereira, "Funcionalidad familiar en escolares con comportamientos de riesgo psicosocial en una institución educativa de Sincelejo (Colombia)," *Salud Uninorte*, **33**(3), 429–437, 2017, doi:10.14482/sun.33.3.10932.
- [4] A. Adebayo, E. Ajuonu, B. Betiku, "Family functionality and parental characteristics as determinants of sexual decision-making of in-school youths in a semi-urban area of Southwest Nigeria," *International Journal of Adolescent Medicine and Health*, **28**(4), 413–418, 2016, doi:10.1515/ijamh-2015-0029.
- [5] H. Bravo, J. López, "Resiliencia familiar: una revisión sobre artículos publicados en español," *Revista de Investigación En Psicología*, **18**(2), 172, 2015, doi:10.15381/rinvp.v18i2.12089.
- [6] M. Simón-Saiz, R. Fuentes-Chacón, M. Garrido-Abejar, M. Serrano-Parra, E. Larrañaga-Rubio, S. Yubero-Jiménez, "Influence of resilience on health-related quality of life in adolescents," *Enfermería Clínica*, **28**(5), 283–291, 2018, doi:10.1016/j.enfcli.2018.06.003.
- [7] C. Albuquerque, J. Almeida, M. Cunha, A. Madureira, A. Andrade, "Protective Resilience Factors in Institutionalised Portuguese Adolescents," *Procedia - Social and Behavioral Sciences*, **171**(1), 276–283, 2015, doi:10.1016/j.sbspro.2015.01.122.
- [8] L. Yi-Ching, S. Dong-Chul, "Cumulative family risks across income levels predict deterioration of children's general health during childhood and adolescence," *PLoS ONE*, **12**(5), 1–13, 2017, doi:10.1371/journal.pone.0177531.
- [9] K. Hye-Jin, M. Jin-Young, M. Kyoung-Bok, L. Tae-Jin, Y. Seunghyun, "Relationship among family environment, self-control, friendship quality, and adolescents' smartphone addiction in South Korea: Findings from nationwide data," *PLOS ONE*, **13**(2), 1–13, 2018, doi:10.1371/journal.pone.0190896.
- [10] C. Fernández, P. Baptista, *Metodología de la Investigación*, 6ta edición, McGraw Hill Education/Interamericana, México, 2014.
- [11] G. Guihard, L. Deumier, B. Alliot-Licht, L. Bouton-Kelly, C. Michaut, F. Quilliot, "Psychometric validation of the French version of the Connor-Davidson Resilience Scale," *Encephale*, **44**(1), 40–45, 2018, doi:10.1016/j.encep.2017.06.002.
- [12] Y. Sulimani-Aidan, "Promoting resilience among adolescents in care from their social workers' perspectives," *Children and Youth Services Review*, **94**(1), 43–48, 2018, doi:10.1016/j.chilyouth.2018.09.005.
- [13] L. Tian, L. Liu, N. Shan, "Parent-Child Relationships and Resilience Among Chinese Adolescents: The Mediating Role of Self-Esteem," *Frontiers in Psychology*, **9**(1), 1–11, 2018, doi:10.3389/fpsyg.2018.01030.