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# Socioeconomic factors and the meaning of life in older Peruvian adults

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#### CITATION

Gonzales Quispe KJ, Cáceres Jaqquehua AG, Calizaya-López J. (2024). Socioeconomic factors and the meaning of life in older Peruvian adults. Journal of Infrastructure, Policy and Development. 8(13): 9700.

https://doi.org/10.24294/jipd9700

#### ARTICLE INFO

Received: 10 April 2024 Accepted: 18 October 2024 Available online: 14 November 2024

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**Abstract:** A The meaning of life is the purpose that defines a person's existence based on a set of fundamental objectives that give meaning to life or not. Furthermore, not all individuals have a meaning in life, and it may be absent at some point or stage of life. Objective: To analyze Peruvian older adults' socioeconomic factors and the meaning of life. Method: A descriptive, comparative, quantitative cross-sectional study was conducted. One thousand older adults were intentionally selected through quotas of 100 older adults in 10 localities in Arequipa, Peru. They were administered a survey validated with high levels of reliability on the meaning of life and socioeconomic factors. Results: A moderate level of meaning in life was found. Most older adults believe that increasing age decreases the purpose of living, and existential emptiness grows. Conclusions: Statistically significant differences (p < 0.05) were found between the meaning of life and the following socioeconomic factors: retirement, religion, educational level, cohabitation, marital status, income, and occupation. It is understood that older adults who scored higher on these factors indicate having meaning in life because they still fulfill the role of providers for the family economy, being util to their families compared to the majority who scored low, which indicates an absence of meaning of life leading to an increase existential void.

Keywords: socioeconomic factors, meaning of life, existential emptiness, older adults

# 1. Introduction

During the later stages of life, older people face multiple social, physical, and mental challenges that result in declining their personal, professional, and family capabilities and aspirations. They are often considered a demographic, frequently subject to discrimination, neglect, and abuse. Due to the lack of attention from many families, they may experience feelings of isolation, thus diminishing their purpose of meaning and negatively affecting their overall quality of life (Fuentes-Reyes and Flores Castillo, 2016).

The meaning of life is the purpose that defines a person's existence based on a set of fundamental objectives. Likewise, not all people have a purpose in life and may be absent at some point or stage of it (Tuz-Sierra et al., 2021). Several factors shape and relate to this meaning of existence. On the one hand, people who have mental and physical health problems such as anxiety, depression, anguish, presence of chronic diseases and consume alcohol or substances decrease their well-being and functionality; people who develop positive mental health, are self-effective, self-regulate their behavior, are satisfied with their life, perform different activities (study, work, recreation), present greater functionality and increase their biopsychosocial well-being that is evidenced in their quality of life (Calizaya-Lopez et al., 2023).

The search for life's meaning occurs at all stages of individuals' lives, in different situations and moments. Existence constantly involves uncovering the circumstances and reasons for why and for what purpose we live, given that the purpose of life changes over time. Hence, the meaning of life differs among adolescents, young adults, adults, and older adults due to these aspects, as the objective systems are distinct for each population group at any given moment (Molina, 2021).

Additionally, age is a fundamental variable that influences individuals' meaning of life, especially as they begin to age. Factors such as the presence of illnesses, physical and mental capacity decline, family abandonment, and lack of productive activity contribute to existential meaning loss, diminishing reasons, and purposes for continued living (Usta and Bayram, 2021).

As for the dimensions of study based on logotherapy (purpose to achieve something), it is structured in four factors: Perception of Meaning (PM), which is the way to grasp the motivations and reasons for life and give it the recognition it deserves. Experience of Meaning (EOM) is the perception of life and the everyday that implies the best and the satisfactory. Goals and Tasks (GT) are objectives related to specific life activities and personal responsibility for these actions. The destiny-freedom dialectic (DFD) represents the tension between the destiny-freedom dichotomy in facing death as an uncontrollable, unpredictable, and inevitable event (Condis Viltres et al., 2021; Frankl, 1982).

Based on the review of previous studies for the Peruvian case, insufficient scientific evidence was found regarding the study of the meaning of life in older adults. Most research on the topic has been carried out with samples of adolescents. Additionally, there was limited evidence about the selected variable in this study (the meaning of life) concerning the socioeconomic variables measured within the older adult population. However, it details below the most relevant research that supports this study. Molina (2021) studied the meaning of life in institutionalized older adults, considering their activities before institutionality, personal life history, and life events related to suffering. The study also revealed a scarcity of existential values among older adults, suggesting a potential lack of purpose or meaning in life. Additionally, participants preferred living in the company of fellow residents within the institution. This preference could be linked to feelings of social connection and support. Furthermore, the findings suggest a heightened awareness of mortality among participants, possibly due to limited planning for future quality of life. Despite these challenges, the study also found that spirituality was a source of solace and comfort for older adults. Rojas et al. (2021) studied the experiences and meaning of life of older adults who were victims of violence during the Covid-19 pandemic. They found that the pandemic experience increased negative feelings and thoughts, a lack of meaning in life, and a perception of being a burden to the family. Loneliness was prevalent, and there were no future projects. Additionally, the only solution to relieve the pain caused by the pandemic was seen as death.

In this sense, the research becomes relevant to cover the existing theoretical gap, providing first-hand empirical information on the topic of study in samples of vulnerable populations to describe and compare the behavior of the variable in the

Peruvian context to continue accumulating knowledge, on the meaning of existence in older adults during their last stage of life.

Furthermore, the results found will contribute to both institutions and professionals who intervene or work with older adults, implement and modify new treatment and prevention policies that address the different needs and problems of this population, and families reflect on the importance of social, emotionally and economically integrating their older adults so that the meaning of existence of all its members allows them to improve the quality of life.

Therefore, according to what was described, the objective was to analyze the socioeconomic factors and the meaning of life in older Peruvian adults.

# 2. Materials and methods

The STROBE procedures were used for cross-sectional studies, being the following:

# 2.1. Type of study

The study was descriptive-comparative, non-experimental, cross-sectional, and quantitative. The information was collected during the period from October 2023 to February 2024.

# 2.2. Participants

The participants were 1000 older adults intentionally selected by quotas of 100 older adults in 10 localities in the city from Arequipa, Peru, who were contacted directly in different public spaces such as hospitals, community health centers, grocery stores, and senior clubs in each selected locality. In addition, some older adults contacted were excluded because they did not wish to participate in the study, physical-mental health problems and were illiterate.

# 2.3. Instrument

The Purpose in Life Test (PIL), validated by Noblejas (2000), was used in this study, given the demand for its usefulness to measure the variable in older adults. The original test was developed by Crumbaugh and Maholick (2023). This test can be administered to people from 14 years of age, individually or in groups. The test consists of 20 items and measures the meaning of life and existential vacuum in individuals, considering the following factorial structure: perception of meaning (PM, nine items), the experience of meaning (EOM, seven items), goals and tasks (GT, seven items), and destiny-freedom dialectic (DFD, three items), which obtained good validity indices. It uses a 7-point Likert scale for response options, with each item having different anchor points. The interpretive norms of the test indicate that higher scores imply a higher presence of meaning in life (>106 points), while lower scores imply an absence of meaning in life (<89 points). Additionally, the English version of the instrument was adapted to Spanish by experts in logotherapy for Latin American countries. The test also demonstrates high levels of reliability, correlating with the Logotest at 99.9% and yielding a Cronbach's alpha coefficient of 0.879.

A socio-economic factors sheet was added to the test to gather relevant information such as age, gender, marital status, occupation, family cohabitation, education level, religion, income, economic dependence, and retirement.

Reliability analysis of the instrument for the local sample was conducted using Cronbach's alpha coefficient (Roco-Videla et al., 2023). An alpha coefficient <0.70 indicates questionable reliability, while an alpha coefficient >0.70 is deemed acceptable. Proximity to 1 means high reliability. In this regard, the test result showed an alpha coefficient of 0.852, demonstrating the high reliability of the collected data.

#### 2.4. Procedure

For the application of the instrument, both the managers and the researchers agreed to carry out the research. Initially, the older adults were contacted directly, approaching them in the vicinity of the public spaces they frequent in the selected localities (hospitals, community centers, markets, recreation clubs, and sports centers). Subsequently, they were informed about the objectives of the research, the test instructions, and the informed consent, accepting to participate voluntarily (by signing the respective document).

### 2.5. Ethical considerations

The study is based on ethical considerations related to human health research and the guidelines established by the Ministry of Health of Peru by Ministerial Resolution 233-2020-MINSA to promote research in human health in the country using international ethical standards. Also, approval was obtained from the ethics committee of the Universidad de la Costa (minute 009-2021) for the project titled: "Multicenter and multidimensional study of mental health in the population of Barranquilla and Arequipa."

### 2.6. Data analysis

JAMOVI version 2.3.13 (Jamovi, 2022; R Core Team, 2021) was used for statistical analysis. Before analysis, the data were digitized in a .xlsx file format (Excel). Subsequently, a descriptive and comparative analysis of socioeconomic factors and the meaning of life was performed.

In addition, as part of the analysis, the following steps were followed: to compare two independent samples, the Mann-Whitney U test with effect size (ES) of biserial correlation (rbis) was used. The interpretive rules for rbis are as follows: no effect (rbis = 0.0), small (rbis  $\geq$  0.10), medium (rbis  $\geq$  0.30) and large (rbis  $\geq$  0.50). Independent samples comparison of k was performed using the Kruskal-Wallis H test and Post Hoc tests, with the effect size used being epsilon squared ( $\epsilon^2$ ). The interpretive norms for  $\epsilon^2$  are small for  $\epsilon^2 \geq$  0.01, medium for  $\epsilon^2 \geq$  0.06, and large for  $\epsilon^2 \geq$  0.14 (Caycho-Rodriguez, 2021).

#### 3. Results

The data distribution of skewness, kurtosis, and normality were analyzed using the Shapiro-Wilk test, which revealed that the data did not follow a normal distribution, with values below the significance level (p < 0.05). Additionally, tests for variance homogeneity were conducted. Therefore, non-parametric tests were considered appropriate for data comparison (Kerby, 2014). Descriptive analyses of the socioeconomic variables of older adults yielded the following information: the average age was 69 years with a standard deviation of 6.47 years, ranging from 65 to 98 years. Furthermore, the average number of children was 3.62, with a median of 3 children ranging from 0 to 12. Gender distribution showed that 52.9% were female and 47.1% were male. Regarding marital status, 12.2% were single, 48.4% were married, 19.8% were widowed, 13.8% were cohabiting, and 5.8% were divorced. Regarding family cohabitation, 38.4% lived with their partner, 29.1% lived with their children, 16% lived alone, and 16.5% lived with other relatives. Regarding education level, 40.8% had primary education, 29.5% had secondary education, 17.3% had a higher education, 6.3% had technical education, and 6.1% had no formal education. Occupationally, 27.2% were Homemakers, 17.5% were unemployed, 8.0% were dependent, and 47.3% were self-employed. Regarding economic income, 24.6% had lower income, 26.1% had low income, 10.9% had medium income, 3.5% had high income, 1.8% had very high income, and 33.1% had no income. Concerning economic dependency, 65.6% were not economically dependent, while 34.3% were dependent economically. In addition, 21.4% were retired, while 78.5% were not.

**Table 1.** Numerical analysis of the meaning of life and study dimensions.

Measure	s	Meaning of life	PM1	EOM2	GT3	DFDL4
N	Valid	1000	1000	1000	1000	1000
	Lost	0	0	0	0	0
Mean		95.09	43.50	31.79	33.11	15.02
Median		94.00	43.00	32.00	34.00	15.00
Standard deviation		20.634	9.674	8.542	7.631	4.762
Range		168	63	49	49	21
Mínimum		20	9	7	7	3
Maximum		140	56	49	49	21

Note: PM1 = perception of meaning; EOM2 = experience of meaning; GT3 = goals and tasks; DFD4 = destiny-freedom dialectic.

In the **Table 1** a descriptive numerical analysis was conducted to evaluate the meaning of life in Peruvian older adults. Analysis revealed a moderate level (M = 95.08, SD = 20.634, MD = 94, Range = 20–168), indicating that most older adults consider that as age increases, meaning in life decreases and existential emptiness increases. As for the study dimensions, they showed a similar trend (moderate), with scores indicating a decrease in the perception of meaning, the experience of meaning, goals, and tasks, and the destiny-freedom dialectic, typical characteristics of the older adult population.

**Table 2.** Comparison of the meaning of life according to socioeconomic factors for two samples independents.

W	Sex (n-range)	Economic dependency (n-range)	Retired (n-range)	Religion (n-range)
	Men	Yes	Yes	Yes
	471–515.18	344–486.23	214–545.73	918–548.83
	Mujer	No	No	No
Meaning of life	529-487.43	656–507.98	786–488.19	82–396.12
	U = 117664.5	U = 107924.5	U = 116785.5	U = 118850.5
	p = 0.129	p = 0.258	p = 0.010	p = 0.006
	rbis = 0.0555	rbis = 0.0435	rbis = 0.115	rbis = 0.185

Note: n = sample size; U = Mann Whitney U; p = p-value; rbis = biseral correlation (effect size).

The results of the meaning of life were compared with socioeconomic factors for two independent samples: according to gender and economic dependence, no statistically significant differences were found (p > 0.05), indicating that the comparison groups do not differ. However, differences (p < 0.05) were found for the variables of retirement and religion. Therefore, retired older adults scored higher in the meaning of life compared to those who do not receive a pension (**Table 2**). Additionally, older adults who profess a religion find greater existential meaning than those who do not profess any religion (small effect sizes for both variables).

**Table 3.** Comparison of the meaning of life according to social factors for more than two independent groups (+K).

	Education (n-range)	Coexistence (n-range)	Marital status (n-range)
	Primary 408–438.39	Couple 384–559.57	Single 122–425.02
	Secondary 295-537.26	Children 291–472.15	Married 484–658.23
	Technical 63-535.25	Alone 160–459.07	Divorce 58–558.68
Magning of life	University 173-593.29	Others relatives 165–453.20	Widowed 198-431.70
Meaning of life	No instruction 61-439.04	Others relatives 103–433.20	Cohabiting 138–395.60
	H = 45.189	H = 26.591	H = 74.728
	p = 0.000	p = 0.000	p = 0.000
	$\varepsilon^2 = 0.045$	$\varepsilon^2 = 0.027$	$\varepsilon^2 = 0.075$

Note: n = sample size; H = Kruskal Wallis H; p = p-value.  $\varepsilon^2 = \text{epsilon squared (effect size)}$ .

The results of meaning in life and social factors were compared for more than two independent groups: according to the level of education, family coexistence, and marital status of the older adult, there are statistically significant differences (p < 0.05), therefore, older adults with a university level have higher levels of meaning in life, as well as those who live with their partner and are married (**Table 3**).

The results of meaning in life and economic factors were compared for more than two independent groups: according to income and occupation, there are statistically significant differences (p < 0.05). Therefore, older adults with higher incomes score above the other comparison groups, and older adults still maintain a labor dependency relationship compared to those who do not have one and do not receive economic income (**Table 4**).

**Table 4.** Comparison of the meaning of life according to economic factors for more than two independent groups (+K).

	Incomes (n-rango)	Occupation (n-rango)
	Without incomes 331-419.24	Without occupation 175-390.24
	Less than 500 soles 246-508.97	Homemakers 272-478.06
	From 501 to 1000 soles 261-539.29	Independent 460–527.17
	From 1001 to 1500 soles 109-584.15	
Meaning of life	From 1501 to 2000 soles 35-526.44	Dependent 93–641.73
	More than 2000 soles 18-646.37	
	H = 49.351	H = 53.320
	p = 0.000	p = 0.000
	$\varepsilon^2 = 0.049$	$\varepsilon^2 = 0.068$

Note: n = sample size; H = Kruskal Wallis H; p = p-value;  $\varepsilon^2 = \text{epsilon squared (effect size)}$ .

### 4. Discussion

We aimed to analyze the socioeconomic factors and the meaning of life in Peruvian older adults. We found a moderate level of meaning in life, with most older adults considering that as they age, the meaning of life diminishes and existential emptiness increases. Regarding the dimensions of the study, they exhibit a similar trend (moderate), with scores indicating that both the perception of meaning, experience of meaning, goals, tasks, and dialectic destiny-freedom are decreasing, characteristic of the older adult population. These findings are consistent with the studies of Molina (2021) and Rojas et al. (2021), suggesting that during this stage of life, negative feelings and thoughts increase, along with the absence of meaning in life. Moreover, they perceive themselves as a burden to the family, experiencing loneliness and a lack of future projects, with death seen as the solution to relieve physical and mental pain.

A particular characteristic of the meaning of life in older adults is the family, especially when they engage in acts of active or passive negligence, neglecting the attention, assistance, and care of older adults, which leads to their abandonment, either voluntarily or due to caregivers' lack of awareness (spouse, children, or other relatives). Older adults are often viewed as a family burden, resulting in abandonment even when the family is present, thereby marginalizing these family members in every sense by not being useful within the functioning of the family system (Iraizos-Barrios et al., 2022).

The meaning of life in older adults may further be linked to the quality of life they experience. This connection is very strong when older adults view aging favorably, maintain positive expectations for their future, and avoid functional decline and social isolation. Adequate physical and mental health, strong family support networks, and sufficient financial resources all contribute to a positive meaning of life. Unfortunately, research suggests that these elements are often lacking for older adults in Peru, potentially weakening their meaning of life and contributing to feelings of existential emptiness (Queirolo Ore, 2020; Castillo Sanchez et al., 2020).

A significant contribution of this study focuses on the association of socioeconomic factors with the meaning of life. Given that in the Peruvian context, their use has been less considered to understand the behavior of the meaning of life in older adults, the following relevant results are highlighted: one of the purposes of life for both men and women is to achieve happiness. However, when inadequate aging occurs, there is a lack of plenty, meaning of existence, and utility, leading to a feeling of distance from purposes and goals for strengthening the family and individual environment. On the other hand, no significant differences were observed among older adults based on gender and economic dependency. This is because both men and women, older adults, depend on various economic and social aspects, which may differ in each case. However, aging requires a set of common resources that are needed at this stage of life.

However, significant differences were found for age, retirement, and religion variables. Therefore, as the age of older adult's advances, this leads to structural and functional deterioration, with an increase in existential emptiness as they age, significantly declining the meaning of living [18]. Moreover, retirees exhibit higher scores in terms of meaning in life than those who do not receive a retirement pension. In Peru, only 35% of older adults are affiliated with a retirement system. Despite the minimal pensions offered, these pensions in some way help to satisfy the most basic needs, compared to those who are not affiliated, as they are forced to work or beg for economic resources, which daily frustrates and diminishes the emotional aspect of these individuals (Lopez et al., 2023). On the other hand, older adults who adhere to a religious faith find greater existential meaning than those who do not profess any religion. Most older adults in this stage of life are inclined to religion, enhancing their beliefs, knowledge, spirituality, and faith to emotionally confront the various problems encountered during this life stage (Sanchez-Solano et al., 2022).

Likewise, it was found that older adults with a higher university education level, who live with their partner and are married, have higher scores than those who do not have a level of education, live alone and are divorced, have different life experiences and situations that mark the difference to find meaning in life.

Complementing the previous information, it is evident that older adults who still work and depend on some organization or institution, generating income over 2000 soles, find better expectations, favorable situations of family support, and personal and work development objectives, which impact on giving meaning to their existence, unlike those who do not generate income, and have no occupation.

In that sense, some older adults continue to be necessary for the family because they still assume and fulfill the role of providers of the family economy, and their offspring live in the home owned by the older adult, situations that strengthen the meaning of life of this population. by the level of support and financial help they provide to their immediate family members (Gracia & Lara-Machado, 2022).

Therefore, in Peru, few scientific contributions allow us to understand and predict the behavior of the variables. Furthermore, these results should serve as a reference for other studies that integrate large and more diverse samples (most quantity of regions and participants from other population groups such as adolescents, young people, and adults) to contrast or ratify the data found. In this

way, care policies aimed at older adults can be improved, that stereotypes of this population be mitigated, and solidarity assistance programs are strengthened to cover the basic needs of food, housing, and health. In addition, local governments can then include comprehensive programs that strengthen physical and mental health, productive activity, and participation in democratic decisions within the community and local institutions.

Finally, some limitations were presented during the development and execution of the research; being a cross-sectional study, more robust statistical analyses could not be carried out, due to the data collection at a single moment and the absence of the researcher in the application of the instrument. The participation of older adults was conditioned because several participants had physical and mental health problems (excluded from the study), requiring more time to contact a significant sample, and there were no economic resources to finance the study to carry out research at a macro level.

**Author contributions:** Conceptualization, JCL and KJGQ; methodology, AGCJ; software, KJGQ; validation, KJGQ and AGCJ; formal analysis, JCL; investigation, KJGQ; resources, AGCJ; data curation, JCL; writing—original draft preparation, JCL; writing—review and editing, KJGQ and AGCJ; visualization, KJGQ; supervision, AGCJ; project administration, JCL; funding acquisition, KJGQ. All authors have read and agreed to the published version of the manuscript.

**Ethical approval:** The study was approved by Ethics Committee of Universidad de la Costa, (Approval number: 009-2021). The date of approval is 03/02/2021. All participants signed the informed consent in this study.

**Conflict of interest:** The authors declare no conflict of interest.

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