

Older people and life conditions: analysis from household budget research, Viçosa (MG) Brazil, 2019-2020

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Abstract

Objective: The study aimed to identify the socioeconomic profile of the older population in Viçosa, MG, Brazil, and their living condition and verify the influence of the age, sex and education factors on the income of family members and the older people in particular. Methods: This is a cross-sectional and descriptive study, based on data from the Household Budget Survey (POF) (2019-2020), from the Department of Economics at the Federal University of Viçosa (DEE-UFV). Three hundred and seven households participated in the study and the sample was composed by 167 older people. Results: Most of the older people were female, with an average age of 69.8 (±8.07) years old, education level referring to complete high school and retired (74.90%). As to their income, most of them had R\$2,914.10 on average, which is above the range considered low by the Brazilian Government Registry named "Cadastro Único". They also had the retirement as their exclusive income. The older people were satisfied with their living conditions, especially in regard to housing. The variables gender, age, and education influenced the family members' income. But the age factor did not influence the older people's income when it was singularly analyzed. Conclusions: The studied sample had more satisfactory and favorable income, schooling and living conditions than the older population in the country when compared to studies that used data from the national POF. However, this reality could be linked to the existence of the UFV in the city where great part of the population studies and/or works therefore achieving better educational levels and earning higher incomes once education has a positive impact on the access to better jobs and wages.

Keywords: Older People. Life conditions. Income.

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INTRODUCTION

Greater longevity leads to changes in older people's consumption profile, generating demands for differentiated goods and services¹, with prices and brands that meet their needs². Contemporary older people present a different profile from the older people of decades ago, as they are more active and consumerist, being considered a new segment of the population, with market potential³.

In addition to living longer, the older person lives healthier, works longer, has greater purchasing power and consumes more, both out of necessity and for pleasure and fun⁴.

At the same time, it is necessary to consider that older people do not constitute a homogeneous group, differing in terms of income, education, sex, race, cohort, among others. Thus, in addition to the heterogeneity evidenced by sex and age factors, Camarano and Pasinato⁵ point out that the older people age group is composed of individuals who have total autonomy, contribute to socioeconomic development and play relevant roles in the family, as well as those who are unable to cope with daily activities and who have no income.

Allied to this issue, there is a concern about the older people's expenses in view of the demands imposed by aging. The older people's income is not always able to meet their needs with food, housing, health, among others⁶, especially in cases where they are responsible for or the ones who contribute most financially to the family unit.

Therefore, greater longevity, linked to a greater number of older people, will impact public policies, reflecting on living conditions, economy, consumption, among others. In turn, consumption is influenced by factors such as income, age, preferences, habits and culture².

Thus, it is problematized that characteristics such as education, income, sex and age of the older people interfere in their consumption pattern. Thus, the study identified the older people's socioeconomic profile and their living and housing conditions, and verified the existence of factors

that can influence their income, since it is one of the main determinants of consumption.

Knowing the living conditions of the older person is important to understand the scenario in which they are inserted, with a view to implementing public and social policies that support this segment. Such a survey can be an instrument in the formulation of policies, especially in the areas of health, leisure, education and transport, considering the needs of the older people and the reality experienced.

In terms of literature, few studies were found nationwide, such as Almeida and Kassouf⁶, Melo et al.⁷ and Melo et al.². These studies evaluated the socioeconomic characteristics of the Brazilian older population, while the present study was carried out with the older population of Viçosa (MG), using data from the local Family Budget Survey (POF), which more accurately portrays the reality of the municipality.

METHOD

This is a cross-sectional and exploratory-descriptive study based on data from the POF (2019-2020), carried out by the Department of Economics (DEE) of the Federal University of Viçosa (UFV), in which data from families that included older people in their composition were analyzed.

In the city of Viçosa (MG), the Municipal Human Development Index (IDHM) was 0.778 in 2010. The value, considered high (between 0.700 and 0.799), was reached by the contribution of the longevity (0.883), income (0.758) and education (0.696) factors⁸. The municipality hosts the UFV, which allows the older people who were part of its technical-administrative or teaching staff to have access to a better income when compared to older people retirees from other sectors.

The POF obtains general information about households, families and people, consumption habits, household expenses and incomes, having households as a collection unit⁹ and, as a function, updating the basic consumption basket and obtaining new weighting structures for the price index calculation.

In addition, the POF aims to measure consumption structures, expenditures, income and part of the families' equity variation to provide information on the domestic budget composition and living conditions of the population, as well as the subjective perception of quality of life, in addition to generating databases and studies on the nutritional profile of the population¹⁰.

The POF questionnaire is subdivided into blocks containing questions about household characteristics; Residents of the household; Expenses for product groups related to Food, Clothing, Housing, Household items, Transport, Communication, Health and personal care, Education, Personal expenses, Income and Living conditions.

To categorize the older people's socioeconomic profile, the following variables were considered: age in years, sex, education, professional occupation, source of income and monthly income. In order to know the living conditions of the older population, aspects such as type of household, number of rooms (total, bedrooms and bathrooms) and occupancy condition of the property, perception of sufficient monthly income, minimum monthly income to reach the end of the month, perception of the sufficiency of the amount of food consumed by the family monthly, water service, garbage collection, street lighting, rainwater drainage, water and electricity supply, structural problems in the home and delay in paying expenses.

For the nominal variables, the data found were described by absolute and relative frequency. For scalar variables, in addition to Exploratory Data Analysis (EDA), multiple linear regression analysis was performed with cross-sectional data.

Regarding the last analysis, two regression models were developed to explain the determinants of the older people's income and of those living in households with older people. In both cases, the dependent variable is explained by independent variables such as age, sex and education level, which characterizes a multiple linear regression. The choice of independent variables was based on Cirino¹¹ and Loureiro¹², who used the Human Capital theory

as a theoretical model. Thus, the linear regression equation was estimated:

$$\begin{split} log(Income_{i}) &= \beta_{1} + \beta_{2}Age_{i} + \beta_{3}Age^{2} + \beta_{4}Sex_{i} + \beta_{5}Pre\text{-School}_{i} \\ &+ \beta_{6}BasicEducation_{i} + \beta_{7}HigherEducation_{i} + u_{i} \end{split}$$

in which *log(Income)* is the explained variable expressed by the total monthly income of the older people for one regression, and of family members with older people in the composition, for the other regression; Age, is the individual's age measured in years, being also included in its quadratic form, in order to capture a possible non-linear relationship between *log(Income)* and Age, as suggested by the Human Capital theory. Sex, is a dummy variable that takes the value 1 for men and 0 for women, Pre-School, BasicEducation, and HigherEducation, are dummy variables that present the individual's level of education, with the base group formed by High School, since this level of education was the most common among the older people in the sample. Finally, B, with j ranging from 1 to 7, are the model parameters, while u_i is the stochastic error term.

The possible non-linear relationship between Income and Age would be the result of the normal depreciation of human capital with age. This is because, initially, more years in the labor market tend to mean greater skill and training for work. However, over time, the older age of the worker begins to be seen as a negative point, since the employer starts to associate this variable with the greater difficulty in learning new technologies and the high delay in work activities¹¹.

As the equation was estimated using the Ordinary Least Squares Methods (OLS) in order for the estimators to be efficient and unbiased, it is important that all desirable properties of the method are met. In this sense, cross-sectional data may contain the problem of heteroscedasticity, that is, the dispersion of the error term is not the same throughout the analysis. In this study, this may be due to the fact that some people have very high incomes while others have very low incomes.

The test used to detect heteroscedasticity was the *Breusch-Pagan* test. This has the null hypothesis of homoscedasticity (constant variance) against the alternative hypothesis of the presence of heteroscedasticity. To correct this possible violation, estimation by robust standard errors is performed.

To spatially demonstrate the average income of households with older people in their composition according to the neighborhood where the research was carried out, the Quantum-Gis program was used, which is a geographic information system that allows viewing, editing and analysis of georeferenced data.

RESULTS AND DISCUSSION

The socioeconomic conditions of the older people in Viçosa

To carry out the POF, 307 households in Viçosa (MG) were visited. In 113 of these (36.81%) there was at least one older person residing, totaling 167 older people in the sample. There was an average of 2.93 people residing in such households. According to Almeida and Kassouf⁶, the presence of an older person in the family nucleus, with their stable income, changes the family's consumption structure, in addition to helping to reduce poverty in that unit. Thus, households containing at least one older person were selected for the sample.

The family arrangements identified in the sample were: older person living alone or as a single person (9.74%), older person living with a spouse (23.89%), older person living with a spouse and children (23.89%), older person living with a spouse, children, grandchildren and other relatives (8.85%) and older person people living with children, grandchildren and other relatives without a spouse (33.63%). In 89.38% of the households, the reference person or head of the family was an older person, 46.90% male and 42.48% female.

The high percentage of households headed by older people is noteworthy. According to data from the National Household Sample Survey (PNAD) 2018¹³, from 2016 onwards, there has been an increase in the number of households headed by older people. This can be associated with the stability of the income of the older person, from retirement and pensions, and reflections of the economic crisis and unemployment¹⁴. Furthermore, the head of household is usually associated with the person with the highest or most stable income, which may also explain the result found.

The older people had a mean age of 69.8 (±8.07) years, with a median and mode of 69 years. Most were female (52.10%), corroborating the trend pointed out by Arango and Peláez¹⁵ about the feminization of old age. As Melo et al.² point out, this greater female life expectancy may be linked to a greater and earlier demand for health care by women compared to men, which, consequently, results in a longer life, however, not always healthier. Therefore, despite living longer, women suffer more from functional disabilities, living longer with diseases in the last years of life and tend to have lower levels of life satisfaction than men^{7,16,17}.

Regarding education, the older people had a higher level of education when compared to the national average found in the study by Melo et al.⁷, who identified a low level of education of the older population in the country, consistent with elementary education, when analyzing data from the POF 2008-2009¹⁰.

As for professional occupation, most of the older people were retired, with income ranging between R\$1,500.00 and R\$3,000.00 and sources of income solely from retirement (Table 1).

Table 1. Socioeconomic profile of the older people in Viçosa. Viçosa, MG, 2020.

Variables	Frequency (%)
Gender	
Male	80 (47.90%)
Female	87 (52.10%)
Age (in years)	
60 to 64	50 (29.94%)
65 to 69	49 (29.34%)
70 to 74	26 (15.57%)
75 to 79	19 (11.38%)
80 to 84	15 (8.98%)
85 to 89	3 (1.80%)
90 to 94	3 (1.80%)
95 to 99	2 (1.20%)
Schooling	
Not educated	3 (1.83%)
Preschool (Kindergarten)	4 (2.44%)
Elementary School I Incomplete	12 (7.32%)
Elementary School I Complete	31 (18.90%)
Elementary School II Incomplete	7 (4.27%)
Elementary School II Complete	20 (12.20%)
High School Incomplete	11 (6.71%)
High School Complete	39 (23.78%)
Youth and Adult Education (YAE)	1 (0.61%)
University Education Incomplete	4 (2.44%)
University Education Complete	25 (15.24%)
Techinical Education	3 (1.83%)
Master's degree	1 (0.61%)
Doctorate degree	3 (1.83%)
Occupation	
Private employee	7 (4.67%)
Pulic employee	11 (7.33%)
Housekeeper or housemaid	2 (1.33%)
Street vendor	1 (0.67%)
Employer	1 (0.67%)
Self-employed	7 (4.67%)
Retired	112 (74.67%)
Housekeeper or housewife	9 (6.00%)

to be continued

Continuation of Table 1

Variables	Frequency (%)
Income source	
Private employment	7 (4.67%)
Public employment	11 (7.33%)
Housework	1 (0.67%)
Self-employment or business owner	7 (4.67%)
Alimony, allowance or non-resident donation	2 (1.33%)
Rent, use or exploitation of real estate	1 (0.67%)
No income	8 (5.33%)
Housework and public retirement	1 (0.67%)
Retirement (public or private)	110 (73.33%)
Private retirement and alimony, allowance or non-residence donation	1 (0.67%)
Pulic retirement and rent, use or exploitation of real estate	1 (0.67%)
Monthly income (R\$)	
Up to 1,500.00	46 (34.85%)
1,500.01 to 3,000.00	50 (37.88%)
3,000.01 to 5,000.00	21 (15.91%)
5,000.01 to 7,000.00	5 (3.79%)
7,000.01 to 10,000.00	6 (4.55%)
More than 10,000.00	4 (3.03%)
Did not answer	35 (20.95%)

Source: POF/DEE/UFV, 2020.

The average monthly income of the older people was R\$2,914.10, with a median of R\$2,150.00 and mode of R\$954.00. Among the respondents, a large portion had an income of up to R\$5,000.00, with a variable range between R\$444.00 and R\$15,500.00. Considering the low-income concept used for registration in the Single Registry¹⁸, which states that "low-income families must be registered: those earning up to half a minimum wage per person (R\$522.50); or who earn up to 3 minimum wages of total monthly income (R\$3,135.00)", values in force in 2020, and the average income found for older people, that is, income per person, R\$2,914.10, it can be observed that they were above the range considered as low income in the country.

Although data from the local POF do not allow associating the source of income of these older people with pensions from work at UFV, the relationship is likely, given the income values of 65.16% of older people who had incomes above the minimum wage in force in 2020 (R\$1,045.00). Thus, it is inferred

that the older people retired from UFV had access to higher wages and better living conditions than the national average, portrayed in studies such as those by Melo et al.⁷, since they had, throughout their lives, a better income, which consequently allowed them to live in better socioeconomic conditions than the older people in the country as a whole.

Bento and Lebrão¹⁹ emphasize that older people with lower incomes generally have worse health and physical function conditions, and less use of health services, in addition to the prevalence of chronic-degenerative diseases.

In this sense, Melo et al.⁷ argue that higher income levels allow the older people to acquire better health services, monitoring, support equipment and a more active social insertion, providing them with better living conditions. In addition, according to the authors, income levels are important not only to understand the older person as a potential consumer, but as an active individual, who has needs arising

from age and personal, family, social, economic and cultural characteristics.

Figure 1 shows the average income of households with older people according to the neighborhood of residence. The smallest of them was found in the Novo Silvestre neighborhood (R\$700.00) and the largest, in Acamari (R\$15,500.00).

It was observed that 31.25% of the households with older people had an average income ranging between R\$4,000.00 and R\$6,000.00, with the

highest incomes belonging to households located in neighborhoods characterized as middle and upper class in the municipality, such as Acamari, Clelia Bernardes and Lourdes.

The older people had the highest income in 74.34% of the households, which draws attention to the large number of older people heads of families, who have assumed the role of collaborating with the family income. This income of the older person, within the family structure, becomes relevant due to its stability, increasing the family's purchasing power²⁰.

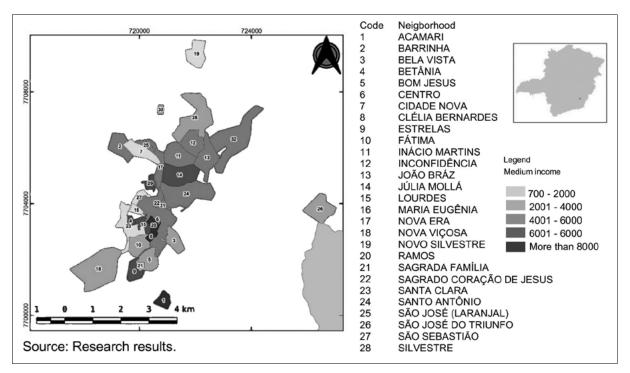


Figure 1. Distribution of the average family income of households with older people, according to the neighborhood of residence. Viçosa, MG, 2020.

As for the housing conditions of the older people's homes (113 homes), 58.18% were non-rustic houses and 20.91%, apartments. The households had, on average, 8.58 rooms, with 3.11 bedrooms and 2.02 bathrooms, with 83.18% owned, already paid off, 2.65% owned, in acquisition, 9.73% rented, 2, 65% transferred, and 1.77% did not inform.

In general, the older people considered water services (62.96%), garbage collection (49.07%), public lighting (56.48%), rainwater drainage (46.73%), water supply (57.94%) and electricity (82.41%) good. It

should be noted that only the supply of electricity received satisfactory approval. The satisfaction level of around 50% for the services provided by the municipality indicates the need for significant improvements.

Regarding the older people's perception of the conditions of their homes, they were satisfied with the space (93.52%), house lighting (85.19%), roof (92.52%), foundation, walls and floor (88.79%), windows and floors (90.65%), street or neighbors (66.67%), pollution or environmental problems

(82.41%), and violence or vandalism in the vicinity (50.00%). It is believed that this last question is of great concern to the community as a whole, because, as stated by Siqueira et al.²¹, the crime rate in the municipality of Viçosa (MG) grew from the 2000s onwards, requiring the authorities to invest in security and fighting crime.

Regarding the perception of the sufficiency of the total income received, 71.30% considered that the amount received did not allow reaching the end of the month without some degree of difficulty, with R\$5,000.00 considered the minimum monthly income necessary to reach the end of the month for 15.00% of respondents (Table 2).

Table 2. Perception of the older people from Viçosa regarding their income. Viçosa, MG, 2020.

Variables	Frequency (%)
Minimum monthly income required to reach the end of the month (R\$)	
Até 1,000.00	6 (7.5%)
1,000.01 to 2,000.00	14 (17.5%)
2,000.01 to 3,000.00	17 (21.25%)
3,000.01 to 4,000.00	13 (16.25%)
4,000.01 to 5,000.00	12 (15.00%)
5,000.01 to 6,000.00	4 (5.00%)
6,000.01 to 7,000.00	4 (5.00%)
7,000.01 to 8,000.00	4 (5.00%)
More than 8,000.00	6 (7.50%)
Did not answer	33 (29.20%)
The total income allows you to reach the end of the month:	
With great difficulty	5 (4.63%)
With difficulty	14 (12.96%)
With little difficulty	33 (30.56%)
With some difficulty	25 (23.15%)
With ease	22 (20.37%)
Very easily	9 (8.33%)
Did not answer	5 (4.42%)
The amount of food consumed by your family is:	
Usually not enough	1 (0.93%)
Sometimes not enough	5 (4.67%)
Always enough	101 (94.39%)
Did not answer	6 (5.31%)
Delay in the payment of rent or real estate mortgage or financing	
Yes	1 (0.94%)
No	105 (99.06%)
Did not answer	7 (6.19,%)
Delay in the payment of water, electricity and other bills	
Yes	6 (5.61%)
No	101 (94.39%)
Did not answer	6 (5.31%)
Delay in the payment of goods and services	
Yes	2 (1.87%)
No	105 (98.13%)
Did not answer	6 (5.31%)

Source: POF – DEE/UFV. 2020.

The data revealed a certain paradox regarding the sufficiency of income for the older people. Although 71.30% considered that the total income received was not enough to reach the end of the month without difficulty, the amount of food consumed in the month was considered sufficient by 94.39% of them (Table 2). One aspect that can be assumed is that, despite the income not being sufficient, the families of these older people can prioritize the purchase of food. Melo et al.⁷ point out that income is directly related to the family's purchasing power. Bento and Lebrão¹⁹ clarify that the satisfaction of what is understood as minimum needs, consumption habits and preferences of individuals vary according to the environment in which they are inserted. In this way, income would not be the only factor preventing individuals from consuming or not achieving something, as the physical and social characteristics acquired affect their lives.

Regarding the amount of food consumed in the month, it was found that the households where it was stated that this amount was sometimes not enough were in the income bracket of up to R\$2,000.00 per household. Regarding the sufficiency of monthly income, there were households that had a total income of R\$954.00 and considered that it allowed them to reach the end of the month with little difficulty, revealing an overestimation of income. On the other hand, an underestimation of income was identified in households that accounted for incomes from R\$4,000.00 and that also highlighted a little difficulty to spend the month.

Thus, it is inferred that the perception of income sufficiency differed between households with older people, showing that this perception is subjective and dependent on factors such as the context in which one lives, lifestyle, number of people in the household and their needs. Bento and Lebrão¹⁹ emphasize that it is important to understand the understanding of the older person about the care, or not, of their basic and human needs, as this is related to the perception of income sufficiency.

Studies indicate that older seniors tend to overestimate their income satisfaction by underestimating their financial difficulties. As they are older, these people would have better information about their health condition, would know more precisely the discontinuities to which they are susceptible and would have greater experience in managing their resources according to their income level and in relation to younger seniors¹⁹. Still, according to the authors, there would be the theory of cognitive dissonance, in which the older people, when experiencing a decrease in their income, would change their interpretation of how much they would actually need to survive satisfactorily.

Thus, it is not possible to generalize the perception of income sufficiency in the studied sample, as it is individual and relative, depending on factors and peculiar characteristics of each family.

In 71.30% of the households, it was considered that the total monthly income did not allow them to reach the end of the month without difficulties. However, on average, in 97.19% of the households there were no delays in the payment of expenses such as rent, water and electricity bills and the provision of goods and services, which may reveal satisfactory administration of the budget by the families.

Influence of age, sex and education variables on earnings

The results of the *Breusch-Pagan* test for the general and older person-only models presented test statistics equal to 0.52, with a *p*-value of 0.47. As these statistics were not significant, being interpreted as acceptance of the null hypothesis of homoscedasticity, estimation by robust standard errors was not necessary.

For the general model, the results of the multiple linear regression estimation showed that age had a positive influence on the individual income of family members (Table 3). That is, for each year of age of the individual, his income increases by 3%. This result can be explained by the fact that as age can be seen as a proxy for experience in the labor market, the greater the experience, the greater the possibility of reaching jobs with better salary. The age squared was not significant to explain the individual's income, indicating that for the sample in question, there was no depreciation of human capital suggested by the Human Capital theory.

As for the case in which only the older person's income was analyzed, it was observed that age and age squared did not influence the income received by the older person. That is, for these older people, advancing age will most likely not imply an increase in income, since 74.67% were retired and their sources of income came exclusively from retirement.

The results showed that the gender variable had an influence on the individual's income, with males having an income greater than females by 34% and 40%, respectively, for the general models and for older people. Barros²² found in his study a difference of 22% in female income compared to male income. Regarding the gender income differential, Freisleben and Bezerra²³ point out that although women are generally more educated, there is still a wage differential in favor of men not explained by the difference in attributes, indicating

the existence of discrimination in the labor market. Cirino¹¹ found that there was a reduction of 6.2 percentage points in income discrimination between genders between 2002 and 2014, although there is still a gap of about 30% more in unexplained income between men and women.

Some qualitative variables of education level were included in the analysis, keeping high school as a base. For the general model, it was observed that the individual who had only preschool had an income 53% lower than those who had completed high school. While the individual with higher education, or some level above, had an income 50% higher than those who did not have this level of education. In relation to elementary school, as this qualitative variable was not statistically significant, individuals with this level of education had an income similar to those with high school.

Table 3. Results of the cross-sectional analysis for the individual income of family members and for the income of the older person. Viçosa, MG, 2020.

Explanatory variable	Explained variable	
	Individual income of family members Coefficient / p-value	Older person income Coefficient / p-value
Age	0.031 / 0.018* (0.013)	0.128 / 0.175 (0.094)
Age ²	-0.000 / 0.186 (0.000)	-0.008 / 0.224 (0.006)
Gender	0.345 / 0.000*** (0.088)	0.404 / 0.001*** (0.114)
Preschool	-0.534 / 0.153 (0.372)	-0.895 / 0.055*** (0.462)
High school	-0.145 / 0.204 (0.114)	-0.248 / 0.064* (0.133)
University education	0.504 / 0.000*** (0.108)	0.458 / 0.003*** (0.151)
Constant	6.081 / 0.000*** (0.342)	2.298 / 0.509 (3.467)
Number of observations	207	130

^{***} and * demonstrate the statistical significance of the coefficient at 1% and 10%, respectively. Values in parentheses are standard errors.

Source: Research results.

For the model considering the monthly income of the older people, in cases where the older person had only preschool, their income was 89% lower than that of the older person with high school. For those with elementary education, income was also lower, however, at only 24%. The specific results for the older people showed that those who had higher education, or some level above, also had an income 45% higher than those with secondary education.

The result is in line with the findings of Bento and Lebrão¹⁹ and Cirino¹¹, who emphasize that these results on schooling are in line with what is recommended by the Human Capital theory. In this way, the income generated by the individual is attributed to their competence, one of the components being education. That is, the more educated the individual, the greater the income earned in the labor market.

CONCLUSIONS

The study identified the socioeconomic profile of the older population of Viçosa, as well as their living and housing conditions, and verified the existence of factors that can influence the income of individual members and older people in the city of Viçosa (MG).

The data referring to the socioeconomic profile of the sample participants revealed that the majority of the older people were female, average age of 69 years old, level of education referring to complete high school, retired, average income above the national average, coming exclusively from retirement.

In general, in households with older people, the level of satisfaction with living and housing conditions was favorable and satisfactory, which may be associated with the fact that they have a significant average per capita income and above the range considered low. Older people with higher levels of education and male sex had the highest incomes, evidencing the influence of education and gender on income.

It is concluded that the older people studied had more satisfactory and favorable living conditions, income and education than the older people in the country in general, demonstrated in studies based on data from the national Family Budget Survey. This reality, however, can be linked to the existence of the Federal University of Viçosa in the municipality, where a large part of the population studies and/or works, earning better educational levels and higher incomes, since education has a positive impact on access to better jobs and wages.

The scientific contribution of this study stems from the fact that there are no other studies with the older population of the municipality, especially using data from the local or national Family Budget Survey (POF). Thus, this will serve as a reference for future works in the evaluation of the socioeconomic conditions of this population from a new local POF.

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REFERENCES

- Fonseca Jr. SB, Lima AFR. Proposta metodológica de índice de inflação da terceira idade no município de Goiânia, Goiás. Planej. Polít. Públicas. 2016:113-34.
- Melo NCV de, Teixeira KMD, Silveira MB. Consumo e perfil demográfico dos diferentes arranjos domiciliares de idosos no Brasil: análises a partir dos dados da Pesquisa de Orçamentos Familiares. Rev. Bras Geriatr. Gerontol. 2017;20(5):607-17.
- 3. Silva NNL da, Xavier MP. A terceira idade como foco das propagandas midiáticas de consumo. Psicol. Rev. 2017;21:203-15.
- Kearney AT. Understanding the Needs and Consequences of the Ageing Consumer. Paris: Consumer Goods Forum; 2013.
- Camarano AA, Pasinato MT. O envelhecimento populacional na agenda das políticas públicas. In: Camarano AA (ed.). Os novos idosos brasileiros: muito além dos 60? Rio de Janeiro: Ipea; 2004.
- 6. Almeida AN de, Kassouf AL. Determinantes do consumo de famílias com idosos e sem idosos com base na pesquisa de orçamentos familiares de 1995/96. Rev. Econ. Apl. 2004;8:479-510.

- Melo NCV de, Aurélio M, Ferreira . Condições de vida dos idosos no Brasil: uma análise a partir da renda e nível de escolaridade. Oikos. 2014;25(1):4-19.
- 8. Cirino JF, Rodrigues CT, Silva VE, et a. 4ª Pesquisa de Orçamento Familiar em Viçosa MG. 2019-2020. Viçosa, MG: [publisher unknown]; 2020.
- Instituto Brasileiro de Geografia e Estatística [Internet]. Brasília, DF: IBGE; 2017. Pesquisa de Orçamentos Familiares 2017; 2017 [cited 2019 March 19]; [1screen]. Available from: https://bit.ly/2xJVbFh.
- Instituto Brasileiro de Geografia e Estatística [Internet]. Brasília, DF: IBGE; 2019. Pesquisa de Orçamentos Familiares 2017-2018: Primeiros resultados. 2019; [cited 2019 Oct. 07]; [1 screen]. Available from: https://biblioteca.ibge.gov.br/ visualizacao/livros/liv101670.pdf.
- Cirino JF. Discriminação por gênero no mercado de trabalho: uma comparação do diferencial de rendimento entre homens e mulheres para os anos de 2002 e 2014. Planej. Polít. Públicas. 2018;51:221-53.
- Loureiro PRA. Uma resenha teórica e empírica sobre economia da discriminação. Rev. Bras. Econ. 2003;57:125-57.
- Instituto Brasileiro de Geografia e Estatística [Internet]. Brasilia, DF: IBGE; 2018. Pesquisa Nacional de Amostra por Domicílios; 2018 [cited 11 jan. 2021]; [1 screen]. Available from: https://bit.ly/35xEiMt.
- Cavenaghi S, Alves JED. Mulheres chefes de família no Brasil: avanços e desafios. 32ª ed. Rio de Janeiro: ENS-CPES; 2018.
- 15. Arango DC, Peláez E. Envejecimiento poblacional en el siglo XXI: Oportunidades, retos y preocupaciones. Salud UNINORTE. 2012;28:335-48.

- Camargos MCS, Gonzaga MR. Viver mais e melhor?: estimativas de expectativa de vida saudável para a população brasileira. Cad. Saúde Pública. 2015;31:1-9. Available from: http://doi.org/10.1590/0102-311X00128914.
- 17. Pinquart M, Sorensen S. Gender Differences in Caregiver Stressors, Social Resources, and Health: An Updated Meta-Analysis. J Gerontol Ser B Psychol. sci. soc. sci. 2006;61:33-45.
- Brasil. Cadúnico: Cadastro Único para programas sociais do governo federal [Internet]. Brasília, DF; 2020; [cited 2020 Dec. 04]; [1 screen]. Available from: https://bit.ly/3qLJzJo.
- Bento JA, Lebrão ML. Suficiência de renda percebida por pessoas idosas no Município de São Paulo/Brasil. Ciênc. Saúde Colet. 2013;18:2229-38.
- 20. Zanon RR, Moretto AC, Rodrigues RL. Envelhecimento populacional e mudanças no padrão de consumo e na estrutura produtiva brasileira. Rev. Bras. Estud. Popul. 2013;30:45-67.
- Siqueira EB, Jacob KG, Silveira. Diagnóstico dos homicídios em Viçosa-MG [Internet]. Viçosa: LAEC;
 2017. Available from: http://www.laec.ufv.br/wp-content/uploads/803_DOC-20181018-WA0001.pdf.
- 22. Barros DS. Escolaridade e distribuição de renda entre os empregados na economia brasileira: Uma análise comparativa dos setores público e privado dos anos 2001 e 2013. Rev. Econ. Contemp. 2017;21:1-10. Available from: http://doi.org/10.1590/198055272135.
- 23. Freisleben VS, Bezerra FM. Ainda existe discriminação salarial contra as mulheres no mercado de trabalho da região Sul do Brasil?: Evidências para os anos de 1998 e 2008. Cad. Econ. 2012;16:51-65.