


THE INFLUENCE OF GRANDPARENTHOOD ON LIFE SATISFACTION AND ATTITUDES TOWARDS OLD AGE IN NON-INSTITUTIONALIZED OLDER ADULTS IN THE CONTEXT OF THE COVID-19 PANDEMIC

 <https://doi.org/10.56238/arev6n2-214>

Submitted on: 31/09/2024

Publication date: 31/10/2024

Gabriela Cunha Fialho Cantarelli Bastos¹ and Rogério José de Almeida²

ABSTRACT

This study aimed to analyze the influence of grandparenthood on life satisfaction and attitudes towards old age in non-institutionalized older adults in the context of the COVID-19 pandemic. This is a cross-sectional analytical study with a quantitative approach carried out with elderly people in Brazil. Three instruments were used: a sociodemographic questionnaire, the Life Satisfaction Scale and the Scale for the Assessment of Attitudes Towards Old Age. 200 responses to the questionnaires were obtained from the elderly. Most were 60-69 years old, female and with complete higher education. Most reported having 1 to 2 grandchildren and being satisfied with life. Regarding life satisfaction, the elderly who did not reduce contact with their grandchildren during the COVID-19 pandemic had a higher score ($p = 0.0440$). Regarding attitudes towards old age, a higher score was observed in the elderly with complete higher education ($p = 0.0321$), in those who practice physical exercise > 150 min/week ($p = 0.0402$), in those who spend enough time with their grandchildren ($p = 0.0060$) and who did not reduce contact with them during the COVID-19 pandemic ($p = 0.0070$). Several factors associated with grandparenthood with life satisfaction and attitudes towards old age were evidenced. There is a clear influence that helps to encourage active aging and the establishment of protective emotional and affective bonds in the elderly.

Keywords: Attitudes towards Old Age. Grandfatherhood. COVID-19. Satisfaction with life. Health of the Elderly.

¹ Geriatrician, Master in Environmental Sciences and Health
Pontifical Catholic University of Goiás (PUC Goiás)
E-mail: gabycantarelli@hotmail.com
ORCID: <https://orcid.org/0000-0002-0141-0795>

² Dr. in Sociology
Pontifical Catholic University of Goiás (PUC Goiás)
E-mail: rogeriopucgo@gmail.com
ORCID: <https://orcid.org/0000-0002-2150-6057>

INTRODUCTION

People are getting older. In developed countries, the pace of aging has been occurring slowly and gradually, allowing better organization of infrastructure to receive a greater number of elderly individuals who require a particular and comprehensive approach¹.

Until the mid-nineteenth century, 3% of the world's population reached the age of 60, and grandparents practically did not exist. With the significant increase in life expectancy, the twenty-first century will be considered the century of grandparents, increasing not only the absolute number of grandfathers and grandmothers, but also the length of life performing this function. There are no rules instituted for this social and family role, given that grandparents may live close to or far from their grandchildren, live with them personally or not².

"Grandparenthood", a phenomenon inherent to the present study, is defined as a kinship tie. It is closely linked to the maternal and paternal functions, with an important role in the formation of individuals. Some factors explain the importance that grandparents have been assuming in the family context, among them: the increase in life expectancy, which allows greater contact between generations; the insertion of women in the labor market and new family configurations³.

By performing the role of grandparents, the elderly not only transmit knowledge to younger generations, but also reconnect with their children through contact with their grandchildren. With the entry of women into the labor market, grandparents often actively participate in the support and education of their grandchildren. Contemporary grandparents have enjoyed technological innovations, better physical health care and greater economic stability, which allows for more intense interaction with their grandchildren².

It is assumed that when identifying the epidemiological and biopsychosocial aspects of aging, in an effort to allow old age to be lived and faced in a positive way, it is necessary to consider the primordial aspects of active aging, such as satisfaction with life and attitudes towards old age.

Satisfaction with life can be defined as a global subjective assessment of the satisfaction and/or happiness with one's personal life that each individual makes about himself⁴. It is also related to a feeling of happiness, contentment and fulfillment, being experienced when there is a positive adaptation to the changes of old age. It represents the path to active and successful aging, bringing positive implications to the lives of the elderly.

Attitudes towards old age, on the other hand, are defined as psychologically conditioned actions and feelings within a multidimensional perspective. These attitudes reverberate in ordered predispositions that influence the behavior of the elderly. They can help in the positive coping with the limitations and losses resulting from aging⁵.

Since March 2020, the pandemic generated by COVID-19 has brought a need for profound transformations in social and interpersonal relationships. Among the groups at risk of developing severe forms of the disease, with a greater chance of morbidity and mortality, are the elderly. The transmissible nature of the disease has motivated health organizations around the world to recommend measures to mitigate the number of cases.

As measures to protect the elderly, the recommendations to reduce contagion rates involved social distancing and isolation, with subtraction from usual social activities such as attending churches, markets, and friends' houses, as well as depriving contact with family members, including grandchildren, considered asymptomatic/oligosymptomatic vectors of the virus⁶.

In the context of the pandemic, there were different scenarios regarding the relationships between grandparents and grandchildren. On the one hand, families whose dynamics do not allow the recommended distancing, since they need grandparents as active figures of unpaid care for their grandchildren. On the other hand, families that practiced distancing in order to protect the elderly, led them to a situation of intense suffering due to the deprivation of coexistence⁷.

Therefore, situations of ageism, disabilities and losses can lead to negative attitudes of the person towards old age. The coexistence between generations, especially with grandchildren, can positively influence such attitudes towards old age. The situation of resignification of the social role of grandparents and the time spent with grandchildren can determine a positive effect on the intergenerational relationship⁸.

Thus, this study aimed to analyze the influence of grandparenthood on life satisfaction and attitudes towards old age in non-institutionalized older adults in the context of the COVID-19 pandemic.

METHODS

This is a cross-sectional analytical study with a quantitative approach. This is a research method that seeks to portray a historical moment in time. Its characteristics involve measurements taken at a single moment in time, and no follow-up is required.

The survey was carried out between August and October 2021 through questionnaires applied to the elderly. It did not involve any particular institution, since all research was developed in digital format through social networks, such as WhatsApp, E-mail and Facebook. The *link* containing the Informed Consent Form (ICF) and the questionnaires was sent by the researchers to groups that are part of it and also replicated to other groups in various parts of the country. Participants were asked to replicate this link on social networks and emails, constituting a "snowball" sampling. Thus, it was not possible to evaluate the regionality and nationality of the participants. With this strategy, the research had 200 participants.

The inclusion criterion was: being elderly (over 60 years old). The exclusion criteria were: living in a long-term care institution for the elderly (ILPi) and having a self-reported diagnosis of dementia syndrome.

For the development of the research, three research instruments were used. The first was a sociodemographic and grandparentage questionnaire, developed by the researchers, which sought to identify social data and aspects related to grandparenthood.

The second was the Life Satisfaction Scale, which sought to assess how the person judges their own satisfaction with life. It was proposed by Diener et al.⁴, adapted and validated in Brazil. It consists of 5 items, with answers graded according to a Likert scale. It ranges from 1 (strongly disagree) to 7 (strongly agree). The total score ranges from 5 to 35, so the higher the score, the better the person considers their satisfaction with life.

The third was the Scale of Attitudes in Relation to Old Age, initially proposed by Sheppard in 1981, which was adapted and validated in Portuguese by Neri in 19919. It consists of 20 items that evaluate feelings of satisfaction in old age. The items were answered on a 5-point Likert-type scale, from "strongly disagree" (1) to "strongly agree" (5). Items 1, 2, 3, 7, 8, 10, 11, 13, 14, 16 and 17 were inverted during data analysis, since they refer to negative attitudes towards old age. The scale was analyzed using the global score obtained by the sum of the items. Thus, the scores ranged from 20 to 100 and the higher the score, the better the attitudes towards old age⁹.

Descriptive and inferential statistics were performed. For descriptive statistics, the following were calculated for categorical variables: absolute frequencies (n) and relative percentages [f(%)]; and for continuous variables: mean (measure of central tendency), standard deviation (SD; measure of dispersion).

For inferential statistics, the normality of the data was calculated using the Kolmogorov-Smirnov tests. The assumption of homogeneity of variance was evaluated using Levene's test and, upon verification of heterogeneity of variance, Welch's correction was performed. *Bootstrapping* procedures (1,000 resamples) were performed to obtain greater reliability of the results, to correct deviations from normality in the sample distribution and differences between group sizes.

In addition, Student's t-test for independent samples was performed for variables with two categories (dichotomous), and one-way analysis of variance (ANOVA One Way) for variables with three or more categories (polytomic). Finally, a Spearman correlation test was applied between the results of the life satisfaction scales and attitudes towards old age. Statistical calculations were performed using the *IBM® SPSS®* (Statistical Package for the Social Sciences) *software*, adopting a significance level of 5% (p-value <0.05).

Before starting data collection, the present study was submitted to the Research Ethics Committee (CEP) of the Pontifical Catholic University of Goiás (PUC Goiás), where it received CAEE No. 48008121.9.0000.0037 and its approval took place on June 24, 2021 with opinion 4.804.004.

RESULTS

200 responses to the questionnaires were obtained from the elderly. Regarding demographic data, 62% were between 60 and 69 years old, and the majority were female and had completed higher education (74% and 76% of the sample, respectively). Regarding marital status, 64% reported having a partner, and 56% of the elderly reported being inactive from an occupational point of view. Regarding the practice of physical exercise, 47% of the participants reported being active, with >150 min/week of physical activity (Table 1).

Table 1. Sociodemographic aspects of the 200 non-institutionalized older adults, Goiânia, Goiás, Brazil, 2022.

Variables (N=200)	<i>n</i>	<i>f</i> (%)
Age		
60-69 years old	124	62,0
70-79 years	65	32,5
80 years old or older	11	5,5
Gender		
Female	148	74,0
Male	52	26,0
Schooling		
Elementary school	9	4,5
Middle school	38	19,0
Higher education	153	76,5
Marital Status		
With partner	129	64,5
No companion	71	35,5
Occupational Status (Work)		
Active	88	44,0
Inactive	112	56,0
Physical Exercise		
Inactive	57	28,5
Active, < 150min/week	49	24,5
Active, > 150min/week	94	47,0

Source: Prepared by the authors.

Regarding aspects related to grandparentage, 34.5% reported having 1 to 2 grandchildren and 30% reported having 3 to 4 grandchildren. When asked about contact with their grandchildren, most reported having daily (30%) or weekly (38.5%) contact. Regarding the time spent with their grandchildren, 41.5% reported living with them for enough time and 43.5% would like to spend more time with them. Regarding the impact of grandchildren in old age, the majority (77%) reported that grandchildren had a positive impact. In the context of the COVID-19 pandemic, more than half reported that the pandemic reduced contact with their grandchildren (51%) (Table 2).

Table 2. Aspects related to the grandparentage of 200 non-institutionalized older adults, Goiânia, Goiás, Brazil, 2022.

Variables (N=200)	<i>n</i>	<i>f</i> (%)
Number of Grandchildren		
0	30	15,0
1 to 2	69	34,5
3 to 4	60	30,0
5 or more	41	20,5
Physical Contact with Grandchild(s)		
Daily	60	30,0
Weekly	77	38,5
Monthly	26	13,0
Annual	7	3,5
I don't have grandchildren	30	15,0
Time spent with grandchild(s)		
I've been living long enough	83	41,5
I would like to live more	87	43,5
I don't have grandchildren	30	15,0
Impact of the Grandchild(ren) in Old Age		
Yes, positive impact	155	77,5
No	15	7,5
I don't have grandchildren	30	15,0
The Pandemic Reduced Contact with Grandchild(ren)		
Yes	102	51,0
No	68	34,0
I don't have grandchildren	30	15,0
Grandchildren motivated physical activity		
Yes	107	53,5
No	63	31,5
I don't have grandchildren	30	15,0

Source: Prepared by the authors.

Regarding the answers to the Life Satisfaction Scale, the vast majority reported being somewhat satisfied with life, with 50% reporting being extremely satisfied, 36.5% satisfied and 18% reasonably satisfied. In the association between sociodemographic aspects and levels of satisfaction with life, no statistically significant results were identified.

In the association between the data on grandparents and the Life Satisfaction Scale, a higher score was identified in the elderly who reported not having reduced contact with their grandchildren in the context of the COVID-19 pandemic ($p=0.0440$) (Table 3).

Table 3. Association of aspects related to grandparenthood with the levels of satisfaction with life of the 200 non-institutionalized older adults, Goiânia, Goiás, Brazil, 2022.

Variables (N=200)	Life satisfaction score		p-value*
	Average	DP	
Number of Grandchildren			
0	28,2	4,8	
1 to 2	29,1	3,9	
3 to 4	28,1	5,1	
5 or more	29,1	5,0	0,5027
Physical Contact with Grandchild(s)			
Daily	28,7	4,9	
Weekly	29,2	4,7	
Monthly	27,9	3,2	
Annual	27,7	5,1	0,6094
Time spent with grandchild(s)			
I've been living long enough	29,2	3,8	
I would like to live more	28,3	5,3	0,2158
Impact of the Grandchild(ren) in Old Age			
Yes, positive impact	28,9	4,6	
It had no impact	27,7	4,8	0,3699
The Pandemic Reduced Contact with Grandchild(ren)			
Yes	28,2	5,2	
No	29,6	3,4	0,0440
Grandchildren motivated physical activity			
Yes	28,6	4,0	
No	29,1	5,5	0,4625

Note: For this analysis, elderly people who did not have grandchildren were disregarded.

* Student's t-test for independent samples (dichotomous variables); One-way ANOVA (polytomous variables), with correction with the Welch test.

Source: Prepared by the authors

Regarding the association between sociodemographic aspects and the Scale of Attitudes towards Old Age, a higher score was identified in the elderly with complete higher education ($p=0.0321$) and in the active elderly who exercised $>150\text{min/week}$ ($p=0.0402$) (Table 4).

Table 4. Association of sociodemographic aspects with the levels of attitudes towards old age of the 200 non-institutionalized older adults, Goiânia, Goiás, Brazil, 2022.

Variables (N=200)	Attitude Score		<i>p-value</i> *
	<i>Average</i>	<i>DP</i>	
Age			
60-69 years old	75,5	8,9	
70-79 years	73,5	8,0	
80 years old or older	70,3	9,8	0,0775
Gender			
Female	75,5	8,9	
Male	73,5	8,0	0,1169
Schooling			
Elementary school	67,9	10,9	
Middle school	73,5	9,2	
Higher education	75,3	8,3	0,0321
Marital Status			
With partner	74,8	8,7	
No companion	74,3	8,8	0,7322
Occupational Status (Work)			
Active	75,6	9,1	
Inactive	73,8	8,4	0,1568
Physical Exercise			
Inactive	73,9	8,3	
Active, < 150min/week	72,4	8,3	
Active, > 150min/week	76,1	9,0	0,0402

* Student's t-test for independent samples (dichotomous variables); One-way ANOVA (polytomous variables), with correction with the Welch test.

Source: Prepared by the authors.

In the association between the data on grandparents and the Scale of Attitudes in Relation to Old Age, a higher score was identified in those who reported that they lived for a long time with their grandchildren ($p=0.0060$) and in those who did not reduce contact with their grandchildren during the Covid-19 pandemic ($p=0.0070$) (Table 5).

Table 5. Association of aspects related to grandparenthood with the levels of attitudes towards old age of the 200 non-institutionalized older adults, Goiânia, Goiás, Brazil, 2022.

Variables (N=200)	Attitude Score		p-value*
	Average	DP	
Number of Grandchildren			
0	76,3	10,4	
1 to 2	74,4	7,0	
3 to 4	74,2	9,6	
5 or more	74,3	8,7	0,7133
Physical Contact with Grandchild(s)			
Daily	75,0	7,9	
Weekly	73,8	8,9	
Monthly	74,6	8,0	
Annual	72,3	8,8	0,7896
Time spent with grandchild(s)			
I've been living long enough	76,1	7,2	
I would like to live more	72,6	9,1	0,0060
Impact of the Grandchild(ren) in Old Age			
Yes, positive impact	74,5	8,4	
No	72,5	7,7	0,3197
The Pandemic Reduced Contact with Grandchild(ren)			
Yes	73,0	9,3	
No	76,3	6,3	0,0070
Grandchildren motivated physical activity			
Yes	75,0	7,4	
No	73,3	9,6	0,2388

Note: For this analysis, elderly people who did not have grandchildren were disregarded.

* Student's t-test for independent samples (dichotomous variables); One-way ANOVA (polytomous variables), with correction with the Welch test.

Source: Prepared by the authors.

Regarding the correlation between Life Satisfaction and Attitudes towards Old Age, it was evidenced that the two variables under analysis are positively correlated, i.e., the higher the satisfaction with life, the better the attitudes towards old age or vice versa (Rho = 0.374, $p < 0.0001$).

DISCUSSION

The sociodemographic profile of the non-institutionalized elderly in the study sample was characterized by a majority of young elderly (60-69 years old), female, who had a partner and did not work. This data is in line with the epidemiological data of the Brazilian population. In Brazil, the National Household Sample Survey (PNAD) for the year 2019 pointed to a total of 56.1% of female elderly people. In the 2021 PNAD, this percentage fluctuated to 55.9%¹⁰.

This fact occurs mainly due to the lower female mortality, given the greater care with health on the part of women. The expectation is that this difference will be even more accentuated in the coming years, since higher mortality due to the COVID-19 pandemic affected more elderly men¹.

It is important to note that the present study was carried out in the context of the COVID-19 pandemic. Thus, the factors related to the historical moment of the pandemic are relevant in the analysis of the results obtained, both in terms of the sociodemographic profile and the findings on grandparenthood, satisfaction with life, and attitudes towards old age. There was an important repercussion of the pandemic context on health care performance, but the social, economic, political, historical, and emotional contexts were also directly affected by the changes imposed by the reality of facing the pandemic¹¹.

Regarding the occupational *status* of the sample, most of whom were inactive, in addition to the aspects involved with retirement in the elderly, the pandemic brought with it an economic moment of crisis due to the social isolation measures caused by health demands. Such a contingency directly affected the labor market for the elderly. In the comparison between 2019 and 2020, about 230 thousand elderly people stopped working and/or stopped looking for a job¹.

Regarding the most prevalent age group of the study, young elderly, it is important to consider the methodology of application of the research, which used the application of online questionnaires through social media. There are few studies on the use of this type of technology by the elderly. A study on the use of technology and the impacts of the pandemic on the elderly population, carried out by the National Confederation of Shopkeepers (CNDL) in Brazil, showed that, in 2021, 97% of the elderly used the internet daily, and of these, most were concentrated in the 60-69 age group¹².

Epidemiological data on the inclusion of the elderly in the demography of families in Brazil in 2020 showed that most elderly people have partners (52% are married or in a relationship), with the exception that this number has been reducing in recent years (in 2006, it was 55%). The increase in the divorce rate of the Brazilian population has been largely due to its increase among the elderly¹³.

The profile related to the grandparentage of non-institutionalized elderly in the sample was characterized by a majority with one to two grandchildren who enjoy daily or weekly contact with them. The importance of the concept of active aging is emphasized. This is comprehensive and considers not only the factors related to healthy aging from the

physical point of view, but also encompasses social and cultural factors¹⁴. Thus, with regard to the social factors involved in successful aging, there is engagement and social support. The family context is a fundamental influence on aging, as it elaborates the environment and affective bonds¹⁵.

Satisfaction with life and attitudes towards old age are parameters of full ageing beyond the physical point of view, since it encompasses aspects of mental health. In the present study, the vast majority of the sample declared to be extremely satisfied with life. This data may have been influenced by a sample with greater access to health and social opportunities. Even so, this finding is in agreement with a longitudinal study carried out with more than 1,000 elderly people in Florianópolis/SC, which identified that most had a positive self-perception of their health status¹⁶.

In the present study, an association was observed between higher schooling and better attitudes towards old age. This finding is in agreement with a study conducted in the Czech Republic, which demonstrated that more negative attitudes towards old age were found in older adults with lower levels of education¹⁷. In a study conducted with elderly Brazilians, individuals who reported having a graduate degree also had higher levels of satisfaction with life¹⁸. A study carried out in Juiz de Fora-MG showed a prevalence of greater satisfaction with life among illiterate people, when compared to the elderly with a high level of education¹⁹.

Education is a fundamental factor for the aging process. It allows the exploration of innate abilities, increasing cognitive reserve throughout life and, thus, preserving cognitive *status* and acting in a preventive manner in relation to dementia²⁰. This is a variable that correlates with living conditions, since individuals with a higher level of education generally have better income, better opportunities and living conditions, and a better *health status*²¹.

Better attitudes towards old age were identified in the elderly who reported exercising regularly for more than 150 minutes per week. For health, well-being and healthy aging, the WHO recommends at least 150 minutes of moderate-intensity physical activity per week for the elderly population. It is also recommended that they perform activities that help in muscle strengthening, balance training and coordination, aiming to reduce the risk of falls and improve health status²². In the context of old age, the practice of physical exercise reduces mortality from all causes, decreases the incidence of hypertension and type 2 diabetes mellitus, leads to a decrease in symptoms of anxiety and depression, and improves cognitive and sleep health²².

The practice of physical exercise should be encouraged to all elderly people in an individualized way and respecting the limitations that may exist due to basic multimorbidities. Practicing physical activity is a fundamental part of active aging, since it increases autonomy, independence and helps in the socialization activities of the elderly.

In a study conducted in Santa Catarina, Brazil, most of the elderly studied practiced physical activity regularly, and it was observed that physically active elderly people were more satisfied with life²³. A Portuguese study also showed that the elderly who practiced physical activity showed greater satisfaction with life²⁴.

Good physical performance, which can be acquired by the practice of physical exercise, is associated with a lower risk of mortality and improved functionality. Functional *status*, which characterizes the independence of the elderly, is fundamental for active aging. Improved mobility acts on protective mechanisms associated with greater satisfaction with life²⁵.

There are several data in the literature that demonstrate the benefits of grandchildren in the lives of grandparents. The present study demonstrated an association between better attitudes towards old age and living long enough with grandchildren. A systematic review carried out by researchers from Porto, Portugal, showed a trend towards a positive effect of grandparenthood on grandparents' cognition²⁶.

A German study showed that taking care of grandchildren is associated with higher levels of subjective well-being²⁷, as well as a study from Hong Kong that showed that being a grandfather/grandmother was related to higher levels of happiness when compared to elderly people without grandchildren²⁸. A study has even demonstrated the important protective role of having grandchildren in terms of divorces of grandparents during old age²⁹.

The present study demonstrated an association between greater satisfaction with life and better attitudes towards old age in the elderly who did not reduce contact with grandchildren during the pandemic. The elderly were particularly impacted, since the mortality rate from the disease was significantly higher in individuals over 60 years of age³⁰. As this is a group considered at risk, social isolation measures were placed in order to keep the elderly isolated and at lower risk of contact with the SarS-CoV-2 virus. One suggested attempt to mitigate the psychological damage of the elderly during the pandemic was to encourage the use of virtual means to contact family members, including grandchildren⁶.

Thus, apart from the COVID-19 pandemic, social isolation, especially for the elderly, imposed numerous other health consequences, especially with regard to mental health. During the pandemic and isolation, a significantly increased number of symptoms of anxiety, stress, depression, and fear were observed, with a relevant demand for care for the biopsychosocial aspects involved in this context³¹.

An indirect relationship was observed between life satisfaction and loneliness in the elderly. Those who did not feel alone during the pandemic had greater satisfaction with life when compared to those who remained lonely³². A study conducted in Germany showed that strict isolation measures led to a reduction in social contact, with damage to the mental health of the elderly population³³.

On the other hand, during the pandemic, there were situations in which isolation included grandchildren and grandparents in the same environment, who remained isolated together. Intergenerational cohabitation can occur both due to the physical or social needs of the elderly, and because young parents are still financially dependent on their parents³⁴. In these cases, coexistence has increased exponentially. Families that did not impose the distance between grandparents and grandchildren during the pandemic obtained advantages in terms of mental health. The maintenance of intergenerational coexistence allowed for closer ties and affective bonds, so that both generations learned more about health, life skills and cultural values³⁵.

Thus, reducing the distance between grandparents and grandchildren in situations of mental and social vulnerability, as occurs in pandemics, is important to mitigate the negative effects of loneliness. It is essential that health safety measures are respected. However, contact can currently be established in different ways, including by virtual means. In addition, it is essential to take into account the individualized health characteristics of the elderly, without ageist stereotypes, since there is great heterogeneity in health status in this age group.

The present study found a positive correlation between Life Satisfaction and Attitudes Towards Old Age. This data demonstrates coherence in the results obtained, as the elderly with better attitudes towards old age tend to be more satisfied with life, as well as the elderly with greater satisfaction with life have better attitudes towards old age.

CONCLUSION

According to the present study, most participants reported being satisfied with life. It was evidenced that the elderly with complete higher education and those who practice physical activity (>150min/week) have better attitudes towards old age. Educational *status* often reflects greater social and financial opportunities, and is related to better cognitive performance. The practice of physical exercise preserves the functional capacity and physical conditioning of the elderly, which allows greater independence for daily activities, promoting a better quality of life.

Participants who did not reduce contact with their grandchildren during the COVID-19 pandemic had higher life satisfaction, as well as better attitudes toward old age. In addition, the elderly who reported living with their grandchildren for a long time also showed better attitudes towards old age, which demonstrates the important role that grandchildren play in the lives of grandparents, providing a relationship of motivation, affection and emotional reinforcement even in adverse conditions. In addition, a positive correlation was found between satisfaction with life and better attitudes towards old age.

In the context of population aging, it is necessary to develop measures to offer the elderly an active aging, with continuous health opportunities in its biopsychosocial aspect. Identifying the factors related to greater satisfaction with life and better attitudes towards old age allows the development of guidance measures and public policies to encourage active aging and the establishment of protective emotional and affective bonds.

REFERENCES

1. Camarano, A. A., & Fernandes, D. (2022). Envelhecimento da população brasileira: uma contribuição demográfica. In E. V. Freitas & L. Py (Orgs.), *Tratado de geriatria e gerontologia* (5ª ed., pp. 52-65). Guanabara Koogan.
2. Osório, N. B., Sinésio Neto, L., & Souza, J. M. (2018). A era dos avós contemporâneos na educação dos netos e relações familiares: um estudo de caso na Universidade da Maturidade da Universidade Federal do Tocantins. *Signos*, 39(1), 305-315.
3. Scremin, A. L. X., Campeol, A. R., Freitas, A. P. M., Teixeira, K. S., & Pereira, C. R. R. (2019). Avós que coabitam e compartilham as tarefas parentais. *Psicologia Argumentum*, 37(97), 312-330.
4. Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
5. Neri, A. L., Cachioni, M., & Resende, M. C. (2002). Atitudes em relação a velhice. In E. V. Freitas, L. Py, A. L. Neri, F. A. X. Cançado, M. L. Gorzoni, & S. M. Rocha (Orgs.), *Tratado de geriatria e gerontologia* (pp. 972-980). Guanabara Koogan.
6. Graças, H. (2020). O cuidado com o idoso pré, durante e pós quarentena: reflexões sobre um quadro mais amplo. In N. P. Tavares & D. M. V. Nascimento (Orgs.), *Atenção à saúde da pessoa idosa e Covid-19: orientações para um enfrentamento saudável* (pp. 23-26). EDUFRPE.
7. Fonseca, V. M., & Andrade, A. M. M. (2020). A avó enquanto cuidadora: um olhar para os aspectos intergeracionais de mulheres que cuidam de seus netos e seus impactos na Covid-19. *Cadernos de Psicologia*, 2(3), 4-18.
8. Anjos, J. S. M., Gomes, L., Oliveira, M. L. C., & Silva, H. S. (2019). Atitudes sobre a velhice: infância, adolescência, avós e a intergeracionalidade. *Revista Psicológica IMED*, 11(2), 147-165.
9. Neri, A. L. (1991). Atitudes em relação à velhice. In A. L. Neri (Ed.), *Envelhecer num país de jovens: significados de velho e velhice segundo brasileiros não idosos* (pp. 117-129). Unicamp.
10. Instituto Brasileiro de Geografia e Estatística (IBGE). (2022). Pesquisa Nacional por Amostra de Domicílios Contínua: características gerais dos moradores. Disponível em: <https://sidra.ibge.gov.br/tabela/6407#resultado>. Acesso em: 09 dez. 2022.
11. Bueno, G. N., Silva, E. G., Santos, K. H. I., Basília, T. F. R., & Tomaseto, L. B. (2022). A relevância da capacitação do psicólogo para a prática clínica no contexto pandêmico. In W. A. Gama (Org.), *Contribuições da psicologia para o enfrentamento da COVID-19 no âmbito do Conselho Regional de Psicologia da 9 Região* (pp. 136-158). Kelps.
12. Confederação Nacional de Dirigentes Lojistas (CNDL). (2021). Pesquisa uso da tecnologia e impactos da pandemia na terceira idade. Disponível em:

<https://uploads.onsize.com.br/cndi/varejosa/2021/03/15164312/Apresentação-Uso-da-tecnologia-e-impactos-da-pandemia.pdf>. Acesso em: 09 dez. 2022.

13. Brasil. (2020). Idosos e família no Brasil. Ministério da Mulher, da Família e dos Direitos Humanos. Disponível em: <https://www.gov.br/mdh/pt-br/navegue-por-temas/observatorio-nacional-da-familia/fatos-e-numeros/idosos-e-familia-no-brasil.pdf>. Acesso em: 09 dez. 2022.
14. China, D. L., Frank, I. M., Bento da Silva, J., Almeida, E. B., & Lima da Silva, T. B. L. (2021). Envelhecimento ativo e fatores associados. *Revista Kairós-Gerontologia*, 24(29), 141-156.
15. Speranza, A. C. C., Werle, B. M., & Moreira, V. G. (2022). Envelhecimento saudável. In E. V. Freitas & L. Py (Orgs.), *Tratado de geriatria e gerontologia* (5ª ed., pp. 79-84). Guanabara Koogan.
16. Confortini, S. C., Schneider, I. J. C., Antes, D. L., Cembranel, F., Ono, L. M., Marques, L. P., et al. (2017). Condições de vida e saúde de idosos: resultados do estudo de coorte EpiFloripa Idoso. *Epidemiologia e Serviços de Saúde*, 26(2), 305-317.
17. Kisvetrová, H., Mandysová, P., Tomanová, J., & Steven, A. (2022). Dignity and attitudes to aging: a cross-sectional study of older adults. *Nursing Ethics*, 29(2), 413-424.
18. Barros, L. O., Moreira, T. C., Oliveira, D. A., & Noronha, A. P. P. (2021). Relação entre sentido de vida e satisfação com a vida. *Interação em Psicologia*, 25(3), 318-326.
19. Banhato, E. F. C., Ribeiro, P. C. C., & Guedes, D. V. (2019). Satisfação com a vida em idosos residentes na comunidade. *Revista Hospital Universitário Pedro Ernesto*, 17(2), 16-24.
20. Doll, J. (2022). A educação no processo de envelhecimento. In E. V. Freitas & L. Py (Orgs.), *Tratado de geriatria e gerontologia* (5ª ed.). Guanabara Koogan.
21. Zajacova, A., & Lawrence, E. M. (2018). The relationship between education and health: reducing disparities through a contextual approach. *Annual Review of Public Health*, 39, 273-289.
22. Camargo, E. M., & Añez, C. R. R. (2020). Diretrizes para atividade física e comportamento sedentário: num piscar de olhos. Organização Mundial da Saúde. Disponível em: <https://apps.who.int/iris/bitstream/handle/10665/337001/9789240014886-por.pdf>. Acesso em: 09 dez. 2022.
23. Oliveira, D. V., Souza, J. F. Q., Granja, C. T. L., Antunes, M. D., & Nascimento Júnior, J. R. A. (2020). Satisfação com a vida e atitudes em relação à velhice de idosos frequentadores de centros de convivência em função do nível de atividade física. *Revista de Psicologia e Saúde*, 12(1), 49-60.

24. Antunes, R. S. N., Couto, N. R. P., Vitorino, A. P. S. S., Monteiro, D. M., Moutão, J. M., Marinho, D. A., et al. (2019). Atividade física e satisfação com a vida dos idosos: contributo para a validação da Stasis-Faction with Life Scale (SWLS) na população portuguesa. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 14(1), 24-27.
25. Soares, V. N., Fattori, A., Neri, A. L., & Fernandes, P. T. (2019). Influence of physical performance on elderly mortality, functionality and life satisfaction: FIBRA's study data. *Cien Saude Colet*, 24(11), 4181-4190.
26. Rafael, A., Sousa, L., Martins, S., & Fernandes, L. (2021). Cognitive impairment in grandparents: A systematic review. *Psychiatry Investigation*, 18(7), 593-602. <https://doi.org/10.30773/pi.2021.0021>
27. Arpino, B., Bordone, V., & Balbo, N. (2018). Grandparenting, education and subjective well-being of older Europeans. *European Journal of Ageing*, 15(3), 251-263. <https://doi.org/10.1007/s10433-018-0467-4>
28. Lai, D. W. L., Li, J., & Bai, X. (2021). To be or not to be: Relationship between grandparent status and health and well-being. *BMC Geriatrics*, 21(1), 204. <https://doi.org/10.1186/s12877-021-02291-1>
29. Brown, S. L., Lin, I. F., & Mellencamp, K. A. (2020). Does the transition to grandparenthood deter gray divorce? A test of the braking hypothesis. *Social Forces*, 99(3), 1209-1232. <https://doi.org/10.1093/sf/soz114>
30. Ayalon, L. (2020). There is nothing new under the sun: Ageism and intergenerational tension in the age of the COVID-19 outbreak. *International Psychogeriatrics*, 32(10), 1221-1224. <https://doi.org/10.1017/S1041610220000717>
31. Bäuerle, A., Teufel, M., Musche, V., Weismüller, B., Kohler, H., Hetkamp, M., et al. (2020). Increased generalized anxiety, depression and distress during the COVID-19 pandemic: A cross-sectional study in Germany. *Journal of Public Health*, 42(4), 672-678. <https://doi.org/10.1007/s10389-020-01355-3>
32. Altay, B., & Çalmaz, A. (2023). Perception of loneliness and life satisfaction in the elderly during the COVID-19 pandemic process. *Psychogeriatrics*, 23(1), 177-186. <https://doi.org/10.1111/psyg.12805>
33. Benke, C., Autenrieth, L. K., Asselmann, E., & Pané-Farré, C. A. (2020). Lockdown, quarantine measures, and social distancing: Associations with depression, anxiety, and distress at the beginning of the COVID-19 pandemic among adults from Germany. *Psychiatry Research*, 293, e113462. <https://doi.org/10.1016/j.psychres.2020.113462>
34. Cunha, U. C., & Dias, C. M. S. B. (2019). A recoabitação dos filhos e netos na perspectiva de idosos chefes de família. *Contextos Clínicos*, 12(2), 599-616. <https://doi.org/10.5935/1678-1239.20190050>

35. Lyu, K., Xu, Y., Cheng, H., & Li, J. (2020). The implementation and effectiveness of intergenerational learning during the COVID-19 pandemic: Evidence from China. *International Review of Education*, 66(5-6), 833-855. <https://doi.org/10.1007/s11159-020-09828-2>