

EVALUATION OF THE ATTITUDES OF CHILDREN
LIVING WITH SENIORS TOWARD AGINGBruna Moretti LUCHESE^a, Giselle DUPAS^b, Sofia Cristina Iost PAVARINI^c

ABSTRACT

With the aging of the population, it is important to identify how other age groups perceive the elderly. The objective of this quantitative, cross-sectional and descriptive study was to evaluate the attitude of children living with seniors toward aging. Interviews were conducted with 54 children, aged between seven and ten years old, living with elderly people. After socio-demographic data were collected, the Todaro Scale for the Assessment of Attitudes of Children Toward the Elderly was applied. It assesses the domains of persona, cognition, social interaction, and agency. Most children were nine years old, male and had lived with an elderly individual for at least five years. The results showed positive attitudes. The persona domain was associated with 'time living with a senior.' This study's results support health professionals in planning educational interventions, designed to maintain and improve the attitudes of children toward the elderly.

Descriptors: Intergenerational Relations. Aged. Child. Attitude. Family Nursing.

RESUMO

Com o envelhecimento populacional, é importante conhecer como outras faixas etárias percebem os idosos. Trata-se de um estudo quantitativo, transversal e descritivo, que teve como objetivo avaliar a atitude de crianças que convivem com idosos, em relação à velhice. Realizaram-se entrevistas com 54 crianças de sete a dez anos, que moravam com idosos. Após a caracterização sociodemográfica, foi aplicada a Escala Todaro para Avaliação de Atitudes de Crianças em Relação a Idosos, a qual avalia domínios persona, cognição, relacionamento social e agência. A maioria das crianças tinha nove anos, era do sexo masculino e morava com um idoso há mais de cinco anos. Os resultados apontaram atitudes consideradas positivas. O domínio persona apresentou relação com o tempo de moradia com o idoso. Os resultados deste trabalho permitem que as equipes de saúde planejem ações de intervenção educacional, visando manter e melhorar as atitudes de crianças em relação aos idosos.

Descritores: Relação entre gerações. Idoso. Criança. Atitude. Enfermagem familiar.

Título: Avaliação da atitude de crianças que convivem com idosos em relação à velhice.

RESUMEN

Con una población que envejece, es importante saber cómo personas perciben a los ancianos. Se trata de un análisis cuantitativo, transversal y descriptivo, que tuvo como objetivo evaluar la actitud de los niños que viven con ancianos relacionadas a la vejez. Se realizaron entrevistas con 54 niños de siete a diez años, viviendo con ancianos. Se hizo la caracterización sociodemográfica y se aplicó la Escala de Actitudes con Relación a la Vejez para niños, que evalúa los ámbitos persona, cognición, interacción social y agencia. La mayoría de los niños tenía nueve años, era del sexo masculino y vivía con ancianos hacía más de cinco años. Los resultados mostraron que las actitudes fueron positivas. Al ámbito persona se relacionó con el tiempo de residencia con ancianos. Basándose en los resultados hace que los equipos de salud planifiquen acciones de intervención dirigida a mantener y a mejorar las actitudes de niños relacionadas a la vejez.

Descriptorios: Relaciones intergeneracionales. Anciano. Niño. Actitud. Enfermería de la familia.

Título: Evaluación de la actitud de los niños que viven con ancianos relacionadas a la vejez.

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INTRODUCTION

Attitudes toward aging are predispositions composed of cognitive and emotional components, and interaction with elderly individuals that are learned and experienced throughout life⁽¹⁾.

The first investigation addressing this subject was published in 1953 in the United States of America (USA). It assessed the attitude of 147 young adults toward aging through a questionnaire⁽²⁾. Since then, various instruments have been used worldwide to assess attitudes toward aging.

One of the scales most frequently used in Brazil is called the Neri Scale⁽¹⁾. It is a semantic differential scale composed of a set of 40 bipolar adjectives, appropriate to the age of the respondent, with seven levels of intensity. The Neri Scale was initially applied to a sample of 4,300 Brazilian non-seniors⁽¹⁾. It was reformulated some years later and the new version presents 30 pairs of adjectives with five levels of intensity⁽³⁾.

There are various studies in Brazil applying both versions of this scale to young individuals, workers from Long-Stay Institutions for the Elderly, professors of the University of the Third Age (UTAs), seniors, and community health agents, among others⁽⁴⁻⁶⁾.

International studies addressing the attitudes of children toward aging date from the 1970s, while these studies intensified in Brazil in the 21st century. The Neri Scale was adapted to school-age children, between seven and ten years old, to assess the attitudes of children toward aging, and resulted in the Todaro Scale for the Assessment of Children's Attitudes Toward the Elderly. Its internal consistency was considered satisfactory⁽⁷⁾.

The importance of assessing the attitudes of children toward aging is due to the fact that attitudes are formed early in life. The way children see seniors and the aging process can be either modified or maintained. This perception is influenced, in many aspects, by families and adult society⁽⁸⁾, and interventions aimed to modify negative attitudes, or improve and maintain positive attitudes, should begin in childhood⁽⁹⁾.

It is important, given the growth of the elderly population and a concern for this population's wellbeing, to understand how individuals from different age groups perceive the elderly because there is usually a low level of information concerning the aging process⁽¹⁰⁻¹²⁾.

Attitude and behavior are interrelated, thus, a person with positive attitudes toward aging will probably be more concerned about care provided to elderly individuals⁽¹²⁾.

A bibliographic search resulted in few Brazilian studies assessing the attitudes of children toward aging. It is known that family, involving many generations, is largely responsible for providing care to seniors. This assessment is essential, for instance, to guiding educational and health actions directed to this population that are intended to facilitate living together among different generations.

Given the growing number of seniors, increased frequency of intergenerational living arrangements, and the importance of assessing the attitude of children toward the elderly, this study's objective was to assess the attitude of children living with seniors toward aging using a semantic differential scale.

METHOD

This paper was derived from of a master's thesis⁽¹³⁾, with a cross-sectional and descriptive nature and a quantitative approach⁽¹⁴⁾. It was developed in a medium-sized city in the interior of São Paulo, Brazil.

Children (n=54), aged seven to ten years old, enrolled in five Family Health Units (FHUs) located in different regions of social vulnerability, and living with at least one senior (≥ 60 years old), were included in the study.

The study's setting was chosen based on the units' focus on family care and, consequently, the opportunity to address intergenerational relationships, in addition to the possibility of finding data concerning entire families in the units' records.

The São Paulo Social Vulnerability Index (IPVS), created by SEADE⁽¹⁵⁾, was used to identify places of vulnerability. IPVS divides the municipalities by areas according to the degree of vulnerability of the resident population, ranging from 'no vulnerability' (IPVS 1) to 'very high vulnerability' (IPVS 6)⁽¹⁵⁾. There are no FHUs located in regions of 'no vulnerability', thus, this classification was not used.

The five FHUs selected were located in regions that ranged from 'very low vulnerability' (IPVS 2) to 'very high vulnerability' (IPVS 6). A search was performed of the families' files that contain the names and ages of all those living in the area covered by the FHU.

The homes with children presenting the aforementioned characteristics ($n=103$) were visited after exclusion criteria were applied: not being located at home after two visits ($n=21$), having moved away ($n=27$), or the elderly individual having died ($n=1$). Hence, the final sample was composed of 54 children. Due to the loss of individuals after applying exclusion criteria, we opted to interview all the children found.

After the sample was defined, the 54 children were visited again and an interview was scheduled. At the time of the interview, parents or legal guardians were invited to remain with the children, if they desired and provided that they did not interrupt the interview.

Data were collected from June to August of 2009 and included two-stage interviews. The first stage included the application of the socio-demographic questionnaire addressing name, address, gender, age, schooling, family income, number of people living in the house, kinship, and length of time living with a senior. The second stage consisted of the application of the Todaro Scale for the Assessment of Children's Attitudes toward the Elderly⁽⁷⁾, which was completed by the children after orientation.

This scale contains 14 items, each with a pair of antagonistic adjectives, from which the child has to choose the best alternative to complete the concept: "Seniors are:" In addition to the two adjectives, each item has three levels of intensity. After adjusting the items, level **one** represents a positive attitude and is located beside the word with a positive connotation; level **two**, a neutral attitude, is located between the two words; while level **three** represents a negative attitude and is located beside the word with a negative connotation⁽⁷⁾. Hence, the higher the child's score, the more negative her/his attitude toward to aging.

The Todaro scale is divided into four domains: **cognition**, which refers to one's ability to process information and problem-solving capacity; **agency**, which refers to one's autonomy and the tools used to perform actions; **social relationship** is related to affective-emotional aspects; and **persona** includes social labels used to characterize seniors⁽¹⁾.

Data were tabulated and interpreted according to descriptive statistics: simple frequency, central tendency measures (average, variability), standard deviation (SD) and measures of correlation.

Non-parametric tests were applied using the Statistical Package for Social Sciences (SPSS) to assess correlation and compare the variables. The Mann-Whitney test was applied to the variable gender and Kruskal-Wallis test was used for the remaining variables. The level of significance was fixed at 5% ($p<0.05$).

The project was approved by the Human Research Ethics Committee at the Federal University of São Carlos (Project No. 486/2008) and the parents or legal guardians signed free and informed consent forms before the interviews.

RESULTS AND DISCUSSIONS

The socio-demographic characterization showed that most children were nine years old ($n=16$; 29.6%), were male ($n=31$; 57%), and attended the 4th grade ($n=23$; 42.6%). The number of people living in the homes ranged from two to 12, with six on average ($sd=2.34$). Income ranged from half to five times the minimum wage (MW); the average income was 2.04 times MW (the MW current in 2009 was R\$ 465.00 a month).

In regard to kinship of the children to the elderly individuals, 85.2% ($n=46$) were grandchildren, 7.4% ($n=4$) children, 3.7% ($n=2$) great-grandchildren and 3.7% ($n=2$) grandnephews. Most of the children had lived with the seniors for more than five years ($n=41$; 75.9%).

The average score obtained by the children in the evaluation of attitude toward aging using the Todaro Scale was 1.59 points ($sd=0.35$). The minimum score expected was **one**, which represents the most positive attitude possible, and the maximum would be **three** points, representing the most negative attitude possible. Thus, the attitude of children in this study was considered to be positive.

The use of the Todaro Scale for a sample of 249 children, aged seven to ten years old, living in the interior of the state of São Paulo, before and after a reading program related to aging, resulted in an average of 1.52 points on the pretest and 1.38 points on the posttest. The author compared the averages obtained by children living with their grandparents (74.2%) with the averages of those who did not live with seniors and there were significant differences only in the **persona** domain. The children living with their grandparents presented more positive attitudes in this domain⁽⁷⁾. Our findings

show an average slightly higher than the average obtained in the aforementioned study's pretest.

Another study was conducted with 145 Colombian children, aged from eight to 14 years old, to evaluate their attitudes toward seniors, between those living with seniors and those who did not live with seniors, using a semantic differential scale with 32 items and five levels of intensity. No statistical significant differences were found between the children who lived with seniors and those who did not⁽¹⁶⁾.

An American study conducted with 32 children, aged from eight to 11 years old, assessed their attitude using a semantic differential scale before and after they participated in an intergenerational group. No negative attitudes toward aging were found either before or after their participation in the group⁽⁹⁾.

Another study was conducted in the USA and addressed 300 children, aged from seven to ten years old, divided into five groups that received different stimuli before responding to an attitude scale. The children who were in contact with positive words related to their grandparents before answering the scale presented more positive attitudes⁽¹¹⁾.

How the experience of living with elderly individuals influences attitudes toward aging is not clear in the literature. There are studies reporting no relationship between living with seniors and children's attitude toward aging^(7,16), while another study reports that children may be positively influenced by the experience of living with seniors

as long as they perceive it as being positive⁽¹¹⁾. According to other studies, what matters most is not the experience of living with elderly individuals but the quality of such experiences^(12,17).

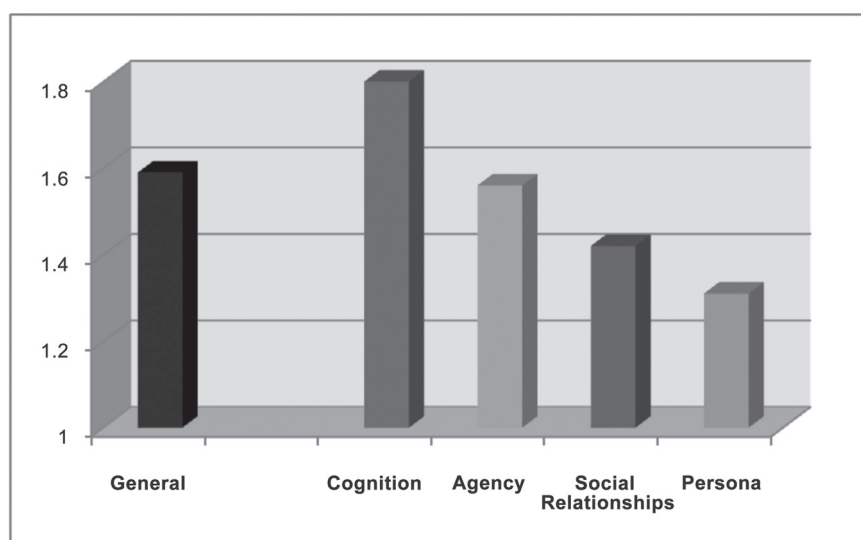
This study's limitation involves the fact that it did not include children living with seniors, which hindered the comparison of data.

Most responses obtained in the total items were positive (**one** point), reaching a percentage of 61.4%; neutral responses (**two** points) reached 16.9%; and negative answers (**three** points) reached 21.7%.

In relation to the scale's domains, the highest average (the most negative attitude) was obtained by the domain **cognition** (average=1.82 points, sd=0.5), followed by **agency** (average=1.56, sd=0.5), **social relationship** (average=1.42, sd=0.45) and **persona** (average=1.31, sd=0.38), as presented in Graph 1.

The domain **cognition**, which comprises seniors' qualities such as intelligence, sharpness, clarity, creativity, attention and how self-assured they are, was the most negatively evaluated. In turn, the domain **persona**, which assesses whether seniors are nice, good people, and generous, was the domain most positively evaluated.

Results similar to those found in this study were reported by the first study using the Todaro Scale: the highest average was obtained for the domain **cognition** (1.66 points) and the lowest, for the domain **persona** (1.27 points)⁽⁷⁾.



Graphic 1 – Average scores concerning the results obtained on the Todaro Scale for the Assessment of Children's Attitudes Toward the Elderly and its domains. São Carlos, SP, Brazil 2009.

The average score of each item on the Todaro Scale, as well as the domain to which each item belongs, are presented in Table 1.

The domain **cognition** obtained the highest average, confirmed by the responses to its items, which obtained the highest averages, i.e. the most negative attitudes. The item 'sharp/dull' presented the highest average and is included in this domain, while 'nice/boring' obtained the lowest average (average=1.19, sd=0.44), suggesting that even though the children consider seniors to be slow, they see them as nice people.

An investigation conducted in the USA assessed an intergenerational program that put children, in the 4th grade (9.5 years old on average), in contact with a group of elderly individuals from a nursing home. Pre- and post-tests were applied using a semantic differential scale with 17 items and seven degrees of intensity. Similar to this study, the item 'sharp/dull' obtained the most negative averages⁽¹⁸⁾.

Table 2 presents the averages children obtained on the scale according to their socio-demographic variables. The results concerning comparisons among variables that counted toward the general scale and its domains are also presented.

The results indicate that the only significant value was found in the comparison between the variable 'time living together with seniors' and the domain **persona**. The children living with seniors for less than three years presented more negative attitudes, followed by those who lived with them for more than five years, and those who lived with seniors between four and five years. The most positive attitude was presented by the children who have lived together with seniors between three and four years. This suggests that living for more than three years with an elderly individual may be a factor that improves the attitudes of children in the domain **persona**.

No significant differences were found in the attitudes of male and female children toward aging. In a previous study that applied the Todaro Scale, the average score for boys was significantly higher than that of girls: 1.59 and 1.45 points, respectively⁽⁷⁾.

In regard to age, there was a tendency of association with the domain **persona** (p=0.069). The seven year-old children presented better attitudes in this domain. In a previous study using the Todaro Scale⁽⁷⁾, younger children presented attitudes significantly more positive than older ones.

Table 1 – Average score in ascending order and standard deviation for each item of the Todaro Scale for the Assessment of Children's Attitudes Toward the Elderly. São Carlos, SP, Brazil 2009.

Item	Average	Standard Deviation	Domain it belongs to
Interesting/boring	1.19	0.44	Persona
Valued/Mistreated	1.26	0.52	Social Relationship
Happy/Sad	1.28	0.63	Agency
Wise/Foolish	1.30	0.54	Cognition
Nice/mean	1.37	0.62	Persona
Open-handed/stingy	1.37	0.68	Persona
Accepted/rejected	1.48	0.79	Social Relationship
Good humor /Grumpy	1.52	0.77	Social Relationship
Creative/Lack of creativity	1.59	0.77	Cognition
Self-assured/Insecure	1.81	0.87	Cognition
Healthy/Sick	1.85	0.86	Agency
Attentive/Distracted	1.89	0.92	Cognition
Clear/Confused	1.91	0.92	Cognition
Sharp/dull	2.43	0.81	Cognition

Source: Database from the master's thesis⁽¹⁸⁾, 2011.

Table 2 – Average score and comparisons of the Todaro Scale for the Assessment of Children's Attitude toward the Elderly, according to children's socio-demographic variables. São Carlos, SP, Brazil 2009.

Variable	Average Scale	p-value Scale	p-value Cognition	p-value Agency	p-value Social Rel.	p-value Persona	
Gender	Male	1.57					
	Female	1.61	0.241	0.158	0.249	0.488	0.177
Age	7 years old	1.42					
	8 years old	1.59					
	9 years old	1.68	0.219	0.240	0.611	0.335	0.069*
	10 years old	1.59					
Grade attended at school	1 st grade	1.49					
	2 nd grade	1.48					
	3 rd grade	1.57	0.362	0.358	0.578	0.502	0.160
	4 th /5 th grade	1.67					
People in the home	2 or 3	1.51					
	4 or 5	1.53					
	6 or 7	1.63	0.824	0.506	0.807	0.530	0.358
	8 or 9	1.66					
Family income	11 or 12	1.67					
	½ to 1 time MW	1.76					
	1 to 2 times MW	1.62					
	2 to 3 times MW	1.57	0.350	0.391	0.063*	0.355	0.805
Kinship	3 to 5 times MW	1.43					
	Grandchild	1.59					
	Son	1.52					
	Great grandchild	1.5	0.829	0.884	0.281	0.182	0.964
Time living together	Grandenephew	1.85					
	< 3 years	2.04					
	3 to 4 years	1.39					
	4 to 5 years	1.55	0.165	0.233	0.230	0.227	0.031**
	> 5 years	1.58					

Nota: *p>0.05 e <0.1; **p<0.05

Source: Database from the master's thesis(13), 2011.

The variable 'income' presented a tendency of association with the domain **agency** (p=0.063). The children of families with the highest and the lowest incomes (3 to 5 times the MW and ½ to 1 times the MW, respectively) also presented more positive attitudes in relation to aging. In turn, children of families with incomes from 1 to 2 times the MW and from 2 to 3 times the MW presented the most negative attitudes in the domain **agency**.

One study conducted in China, with 305 college students (from 18 to 24 years old) and 159 adults (from 38 to 55 years old), evaluated attitudes toward aging.

Higher family income in the adult group was associated with more positive attitudes toward aging, but such an association was not found among the students. The conclusion was that adults need to spend more of their money on seniors in their family and when they have higher incomes, such expenditures are not seen as a problem and more positive attitudes are generated; those with lower incomes do not have the same experience. The college group is not affected by the problems related to the family economic situation, thus, whether their families have low or high income does not influence their attitudes toward aging⁽¹²⁾.

Most (61.4%) of the responses provided to the scale by this study's children were positive (**one** point). Investigations using the Neri scale with different age groups report different results. One study conducted with students of a UTA, in Pernambuco, Brazil found 41% positive responses, 39% neutral responses, and 20% negative responses⁽⁵⁾. In turn, 118 students from the human sciences scored positively in 34.4% of the cases, negative in 33%, and their answers were neutral in 32.6% of the cases⁽⁴⁾. Another study, conducted with 54 elderly individuals (average age of 67 years old) and 58 young individuals (average age of 18 years old) from the Federal District, Brazil reported that the seniors presented 46.7% positive answers, 25.9% neutral answers, and 27.4% negative answers. The young individuals obtained 49.3% positive responses, 23.6% neutral, and 27.1% negative responses⁽⁶⁾.

The numbers indicate that children present the most positive responses when compared to the numbers reported by studies conducted with adults, suggesting that the positive attitudes of children toward aging become negative over the course of adolescence and adult life. Hence, there should be investment in the education of children concerning the aging process so they keep developing positive attitudes.

Even though studies applying the Neri Scale report different evaluations of the scale's domains^(19,20), the domain **cognition**, is the one that presented the most negative averages in all studies, suggesting this domain should receive greater attention in educational actions concerning the aging process.

Gerontological nursing has increasingly been developed and needs to develop understanding of the physical, emotional and social aspects related to seniors. Therefore, those in the discipline should act together with the interdisciplinary staff in educational processes aiming to influence elderly individuals. In this context, not only are seniors important, but also the family and children, as well, so they should be included in the care plan.

For the healthy relationships to develop between children and seniors, children need to learn about the aging process. From this perspective, gerontological education is the main tool available and should be used by the multidisciplinary staff within the scope of primary health care, which is the entrance into the Brazilian Unified Health System and child education.

CONCLUSION

One's attitudes toward an object can influence one's relationship with it, as is the case of children in relation to aging. Their attitudes can affect the way elderly individuals are treated.

The children's attitude toward aging was considered positive in this study. Additionally, when compared to the average score obtained by adults assessed in previous studies, the attitudes of this study's children were more positive.

Because the contact that FHUs maintain with families is very close, these units may be an important place to develop educational interventions addressing the aging process. Nurses working in the participatory management of these units' staffs have an essential role in planning and implementing educational actions, recognizing the child and family to be allies in the care delivered to seniors. Another important set of elements is schools, which can work in partnership with FHUs located in the same area covered by these units.

Due to the increased growth of the senior population, we suggest that the assessment of children's attitudes toward the elderly should be intensified and expanded to other places, such as schools and intergenerational groups, as well as to other age groups, in order to understand what factors are involved in this perception and improve the relationships among generations. Another important aspect is related to the quality of relationships maintained with elderly individuals, which can be explored with qualitative studies.

Finally, it is worth noting that children need, in addition to better knowing elderly individuals and having positive attitudes toward them, to learn to deal with the aging process and become aware that their actions throughout life can influence the way they will age.

We also note the fact that because the study addressed a small convenience sample, its results cannot be generalized.

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