

Impact of the Third Age Open University on the Quality of Life of the Elderly

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Abstract

The education of older adults fosters knowledge leading to a re-dimensioning required to improve the quality of life (QOL) through the concepts of interdisciplinarity, social participation, and the promotion of healthy activities. The objective of this study was to assess the impact of the Third Age Open University (the acronym in Portuguese is UATI) program on the QOL of elderly students. To this end, the scores were measured before and after the intervention (at the beginning and end of the course year) and were compared with the scores of a group not attending the UATI. The data collection tools were as follows: Characterizations of Participants, the Brazilian Economic Classification Criteria, and the Quality of Life Assessment Scale (QdV-DA). All data obtained were entered into the Statistical Package for Social Sciences instrument for carrying out non-parametric statistical analysis. On analysis, the data revealed the following: (a) a positive difference between the total scores of QOL of older adults who were students of UATI before and after the intervention (at the beginning and end of the course year) ($Z = -4.541$; $p < 0.001$); (b) after participation in the UATI, the perceptions of QOL were higher for UATI students compared to the group of individuals who did not participate in the program ($\chi^2 = 7.448$; $df = 1$; $p = 0.006$). The results of this study indicate that participation in the UATI is favorable for enhancing perceived QOL.

Keywords

Quality of life – Aging – Self-assessment – Gerontology – Education.

Introduction

The objective of this study was to assess the effect of the Older Adult Open University (UATI) program on the quality of life (QOL) of elderly students by measuring scores before

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and after the intervention (at the beginning and end of the course year) and comparing the scores with those of a group that did not participate in the UATI.

The National Household Sample Study (PNAD) performed by the Brazilian Institute of Geography and Statistics (IBGE) indicates an increasing proportion of elderly persons in the country, a figure that reached 13% of the population in 2013 (IBGE, 2013). The aging of the population has awakened growing interest in what are called questions linked to well-being and to the QOL (LE PHAM; VO, 2015).

Admittedly, however, this is a recent concern. Until the beginning of the 1960s, Brazil was still a country of young people, with slightly more than 5% of the population aged 60 years or over. The relatively small size and social isolation of this group resulted in insufficient visibility in terms of education and social questions. The few social programs of that time were of an assistentialist¹ character, dealing with basic needs as a way of reducing suffering resulting from misery and disease. For the most part, the programs were conducted as residential institutional programs for older adults maintained by the government or by religious groups with the sole purpose of guaranteeing the physical survival of older adults. No socialization and participation alternatives were available for the older adults in good health (FERRIGNO; LEITE; ABIGALIL, 2006).

The first opportunity for performing educational and cultural activities aimed at older adults in Brazil arose in the context of the *Serviço Social do Comércio* (Sesc) of São Paulo in 1963. Celebrations of birthdays, dances, outings, and parlor games, as well as some educational events, were the first activities conducted to foster healthy aging. The activities diversified with passing time, and other groups arose in other Sesc centers of the state capital and inland cities of State of São Paulo and later in other social centers in other states. This activity revolutionized the work of social assistance for older adults, which beforehand treated only institutional residential questions (CAMARANO; PASINATO, 2005).

The European counterparts, called “free-time universities,” created in France at the end of the 1960s influenced Brazilian Third Age Open Universities. These were conceived as institutions dedicated to increase participation in cultural activities and socialization, with the objective of occupying free time and of fostering social relations among the retired (VELOSO, 2004). According to Cachioni (2003) and Ramos (2008), Pierre Vellas, oddly enough a professor of international law in the University of Social Sciences of Toulouse, upon examining the work of international organizations on and the policies for older adults in industrialized countries and studying the activities on non-governmental organizations, came to the conclusion that the origin of many pathological processes could be found in the problem of social exclusion, given that the opportunities offered to older adults were almost non-existent.

In Brazil, the first recognized university extension program for older adults was the *Núcleo de Estudos da Terceira Idade* (NETI), established at the Universidade Federal de Santa Catarina, a year after the First World Assembly on Aging held in Vienna in 1983, Decree No. 0484/GR/83 (NETI, 2007). The 1990s witnessed a large increase in university extension programs and of programs of other institutions directed at older adults in Brazil. Currently, private institutions of higher learning are those that have invested the most in

this area, followed by state and federal institutions. Lacerda (2009) calls attention to the fact that the general objectives of these programs are quite similar, although the forms of organization and names vary (University for, open to, or of the Third Age).

As with any other educational program, the curricula of Third Age Universities are dynamic rather than definitive, given that they serve people whose needs are in transformation (FORMOSA, 2010; VERAS; CALDAS, 2004; YENERALL, 2003). With regard to the contents, they emphasize the areas of health, culture, sports, leisure, citizenship, work, and voluntary activities. These areas supplement the fostering of the expectation of an active life with high levels of autonomy as much as possible. Fostering sustainable aging involves guidance regarding healthy life habits, such as regular practice of disease prevention, physical exercise, and a balanced diet, in addition to ways of relieving psychological and emotional stress. Moreover, there is an effort to foster participation in the process of producing and consuming culture through experiences in art, music, dance, painting and sculpture, and theater, without neglecting one's social life, contributions to the improvement of society, or participation in the promotion and defense of human rights (FENALTI; SCHWARTZ, 2003).

The principles of these programs are based on egalitarian dialog, cultural intelligence, training for change, instrumental dimension, and solidarity. It is a care model based on diversity and equity, within a context wherein everyone has the same right to think and live differently and to identify what one wants and needs to achieve a good QOL (MARTUCCI; PURQUÉRIO, 2005).

Currently, the best-known definition of QOL is that of the World Health Organization group that defines it as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (WHOQOL, 1995, p. 1405). This definition places QOL as quite a broad concept that incorporates the domains of physical health, psychological state, level of independence, social relations, personal beliefs, and relation with significant aspects of the environment (WHOQOL, 1995). The fundamental principles of aging with QOL describe the elderly person as proactive, defining his or her objectives and struggling to achieve them, bringing together resources that are useful for adaptation to change and actively involved in maintaining well-being in a changing and not always propitious world (FIERRO, 2004).

Fleck (2008), in reviewing the literature, states that a good QOL is present when the hopes and expectations of an individual, modified by age and by experience, are satisfied. For the author, QOL is defined in terms of the difference between individual expectations and reality, wherein smaller differences indicate better QOL. In summary, this is an individual notion, a product of culture defined by society, derived from a combination of the degrees of satisfaction found in family, amorous, social, occupational, environmental, and existential lives (MINAYO; HARTZ; BUSS, 2000).

The QOL concept overlaps with biological aspects, such as health condition, functional status, and incapacity/disability (BOWLING, 2005; LAWTON, 1991); psychosocial aspects such as well-being, satisfaction, and happiness (DIENER; SUH, 1997; LYUBOMIRSKY; KING; DIENER, 2005); and economic factors (BOWLING, 2005; LAWTON,

1991). Fleck (2008) describes two theoretical models of QOL: the satisfaction model and the functionalist model. The latter is based on the principle that a good QOL depends upon a satisfactory performance in social and functional roles valued by the individual. Illnesses, by minimizing the performance of these roles, reduce QOL. Therefore, in this model, being healthy is indispensable. However, the functionalist theoretical basis is insufficient when studies demonstrate that there are seriously ill individuals who relate satisfactory balance among the mind and body, spirituality, and social and environmental relations contributing to a good or excellent QOL (ALBRECHT; DEVLIEGER, 1999).

In the literature, we identified studies that, in their general or specific objectives, dealt with the assessment of generic QOL, subjective well-being, or the life satisfaction of students of multidisciplinary programs termed Older Adult Open University. This being a review of the literature, variations such as University *Open to* Older Adults, University *for* Older Adults, and Older Adult University were encountered. We should mention at this point that all research was excluded whose analyses focused on a single domain of QOL or those that used other assessment indicators such as depression, social skills, changes of eating habits, and the practice of physical activities.

Twenty studies were found to meet the inclusion criteria (ALVES, 2008; ANDERSON et al., 1998; ASSIS, 2004; CACHIONI, 1998; CASTRO et al., 2007; CIESLAK et al., 2007; CRUZ, 2003; LIMA et al., 2007; ERBOLATO, 1996; IRIGARAY; SCHNEIDER, 2008a; IRIGARAY; SCHNEIDER, 2008b; JACOB, 2007; LOESER, 2006; LOURES, 2001; LOURES et al., 2010; MACHADO, 2004; MELLO, 2008; MITCHELL; LEGGE; SINCLAIR-LEGGE, 1997; SONATI et al., 2011; ZIELIŃSKA-WIĘCZKOWSKA et al., 2012). Of these, the oldest is that of Erbolato (1996) and the most recent that of Zielińska-Więczkowska and collaborators (2012). We note that most studies on UATI are descriptive, with data collected during a single session (ALVES, 2008; ANDERSON et al., 1998; CACHIONI, 1998; CASTRO et al., 2007; CIESLAK et al., 2007; CRUZ, 2003; LIMA et al., 2007; ERBOLATO, 1996; IRIGARAY; SCHNEIDER, 2008a; IRIGARAY; SCHNEIDER, 2008b; JACOB, 2007; MACHADO, 2004; MELLO, 2008; MITCHELL; LEGGE; SINCLAIR-LEGGE, 1997; SONATI et al., 2011; ZIELIŃSKA-WIĘCZKOWSKA et al., 2012).

With regard to those studies that had more than one data collection, Assis (2004) interviewed students before and after intervention. However, the program evaluated was a project with emphasis on the health promotion of the UnATI/UERJ; that is, the research focus was not on the educational program as a whole. Loeser (2006) interviewed students soon after the intervention and again 11 months later, which makes this study a follow-up one with qualitative analysis. However, the lack of a baseline at the beginning is a limitation in terms of assessing the efficacy of the intervention. Only the studies of Loures (2001) and Loures et al. (2010) were carried out with data collected twice, once at the beginning and once at the end of intervention. The quantitative data and statistical analyses of these authors pointed toward the efficacy of the Older Adult Open University program for improving the QOL of participants.

Comparative studies did not indicate greater efficacy of UATI programs compared to other programs with a specific focus on social participation, recreation, religion, or physical activities (ALVES, 2008; CASTRO et al., 2007). The work of Cruz (2003) was

the only one that noted that the most satisfied individuals were those with high levels of schooling, without regard to participation in UATI; all others argued that educational programs for older adults can foster, or at least maintain, their QOL.

Given that up to the present, single-data-collection designs are most plentiful and that there is a need for comparisons with a control group, the objective of the present study mentioned at the beginning of the introduction is justified.

Method

Characterization and place of the study

This was a quantitative, descriptive, cross-sectional study. The UATI evaluated exists within an institution maintained by the municipal government that fosters the education of young people, adults, and the elderly in training processes outside the formal school curriculum.

All participants resided in a mid-sized city located within the State of São Paulo. According to an IBGE estimate, in 2015 this city had approximately 240,000 inhabitants. Of these, approximately 30,000 were 60 years of age or over, representing 12.8% of the total population (IBGE, 2015).

Participants

This study had 54 elderly participants divided into the following group: (a) observation group, comprising individuals who participated in activities of the UATI for one course year, and (b) comparison group, comprising individuals who did not participate in activities of the UATI.

Criteria for inclusion in the observation group were as follows: having completed the two semesters of Module I of the course, with minimum attendance of 75%, and by merit, having been awarded a course completion certificate issued by the institution; being 60 years of age or older; that is, being considered chronologically elderly, according to criteria of the World Health Organization; and having freely and clearly accepted to participate as a subject of the study. All of the UATI students who met the inclusion criteria ($n = 36$) were invited to participate in the study; 27 accepted the invitation.

In order for the comparative analysis to be plausible, the comparison group was composed of people with age, gender, and social vulnerability variables paired with the observation group. Theoretically, pairing of the social vulnerability levels of the groups would enable them to have similar socio-economic variables (FUNDAÇÃO SEADE, 2010).

Data collection

After the research project was approved by the Research Ethics Committee of the Universidade Federal de São Carlos (CEP/UFSCar), ruling No. 233/2008, the coordinators

of the UATI were contacted in order to formally clarify the objectives and justification of this study. Having received permission to collect data from the UATI students, we prepared a list of potential subjects for the observation group. All those who met the inclusion criteria were briefed on the research and its objectives and invited to be participants. Those who agreed responded to the instruments described below.

The UATI students were interviewed when possible within the institution. The researcher was on the campus every day, available to apply the instruments. For students not located within the institution and for students who so wished, the researcher went to their residence to collect data. The participants in the comparison group were interviewed at their residences. The data were considered according to the immediate responses obtained through the instruments, without external intervention.

In order to locate potential participants for the comparison group, individuals were nominated by the participants of the observation group. However, to be a part of the data bank, those nominated needed to present paired variables of age, gender, and social vulnerability. In cases in which the nominated subject did not meet such criteria, the researcher would interview others until the required profile was found.

Initial interviews (at the beginning of the course year) were conducted in March 2009, and final interviews (at the end of the course year) took place in November and December of the same year.

Instruments

Participant Characterization Card: this was utilized to collect personal and socio-demographic data of the participant.

Brazilian Economic Classification Criterion: this was used to assess the socio-economic level through family purchasing power, based on their possession of consumer durables, level of education of the head of family, and some other factors such as the presence of a household worker.

This scale divides the population into eight social categories (A1, A2, B1, B2, C1, C2, D and E). Criteria for social classification in Brazil were established by the Brazilian Association of Advertisers (ABA), the National Association of Market Research Companies (Anep), and by the Brazilian Association of Market Research Institutes (Abipeme), all based on the socio-economic research of 2006 and 2007.

Quality of Life Assessment Scale (QdV-DA): this is a QOL scale, with 13 assessment items (physical health, disposition, mood, residence, memory, family, marriage, friends, the self in general, ability to carry out tasks, ability to carry out leisure activities, money, and life in general) that were selected through a review of the literature on elderly populations. Semantic validation included participation of older adults with and without dementia, care-giver, and specialists in the area (LOGSDON et al., 1999). Participants quantify the items of the instrument on a 4-point scale, with 1 for "poor," 2 for "moderate," 3 for "good," and 4 for "excellent." The minimum point score is 13, and the maximum is 52; higher indices denote better

QOL. The scale was translated, adapted trans-culturally for the Brazilian culture, and validated by Novelli (2003, 2006). We justified the choice of this scale by its having been developed through a review of the literature on the QOL of geriatric populations and validated for the Brazilian culture for both the elderly with cognitive alterations as well as their care-givers who do not necessarily present health problems or are aged above 60 years; therefore, it is appropriate for any person. In terms of the speed and facility of comprehension, the instrument is quite appropriate and considers the specific domains of relevance for the aged population in addition to the generically important domains. For criteria validity, the scale presents significant correlations with the classic instrument of the WHO, WHOQOL-BREF. This confers security and reliability for the obtained data (NOVELLI, 2006).

Data analysis

The obtained data were entered into a bank in the Statistical Package for Social Sciences (SPSS) program in order to carry out: (a) descriptive analyses to characterize the socio-demographic profile of participants; (b) Pearson and Mann-Whitney chi-square tests for comparative analyses of the pairings between observation and comparison groups; (c) Wilcoxon test to identify changes occurring in each dimension and in the total QOL scores.

Ethical aspects

All of the phases of this work obeyed the guidelines of Resolution 196/96, version 2012 (BRASIL, 2012). Data collection was started only after obtaining the approval of the research project from the Committee of Research Ethics/National Research Ethics Commission (CEP/Conep) (ruling No.233/2008). All participants were briefed on the objectives of the work, consulted regarding their availability to participate in the study, and assured of the secrecy of individual information. The instruments chosen for the data collection have been validated for the Brazilian culture and widely used in the academic-scientific area. Participants were assured of their right to interrupt or withdraw their participation without justification at any moment during the data collection.

Results

Socio-demographic profile of elderly students of the UATI

Of the 27 sample participants, 89% were female ($n = 24$), and 11% were male ($n = 3$). The average age of the group was 68.4 years ($SD = 5.42$, $x_{\min} = 60$, $x_{\max} = 78$). In terms of level of education, 1 (3.7%) had only completed pre-school; 10 (37%) had incomplete primary school education, 8 (29.6%) completed secondary school, and 8 (29.6%) had completed higher education. The data referring to the socio-economic levels of the

participants, obtained through the Brazilian Economic Classification Criterion, revealed that 7.4% (n = 2) of the individuals were of class A1; 7.4% (n = 2) of A2; 14.8% (n = 10) of B1; 37% (n = 10) of B2; 25.9% (n = 7) of C1; and 7.4% (n = 2) of class D. One should note the high degree of schooling and favored socio-economic level of this group.

With regard to marital status, we observed that only 3.7% (n = 1) of those interviewed were single, 7.4% (n = 2) were separated, 29.6% were widowed (n = 8); the majority (n = 16, 59.3%) were either married or lived with a companion.

Socio-demographic profile of the elderly of the comparison group

This being a comparison group, the gender composition was identical to the group of elderly students of the UATI (89% female and 11% male). The average age of the group was 67.44 years (SD = 5.60, $x_{\min}=60$, $x_{\max}=78$). Of the participants in the comparison group, 1 (3.7%) was illiterate, 18 (66.7%) had incomplete primary school education; 6 (22.2%) had completed secondary school; and 2 (7.4%) had completed higher education. Socio-economic levels, obtained through the Brazilian Economic Classification Criterion, showed that 7.4% (n = 2) of the sample were of class B1; 40.7% (n = 11) of C1; 25.9% (n = 7) of C2; and 7.4% (n = 2) of D. With regard to marital status, we observed that none of those interviewed was single, 7.4% (n = 2) were separated, 37.0% were widowed (n = 10), and the majority (n = 15, 55.6%) of the elderly were married or lived with a companion.

Testing the pairing of the two elderly groups, UATI and non-UATI, in terms of socio-demographic variables

The groups of elderly students and non-students of the UATI did not differ statistically in terms of age variables ($U = 338.50$, $Z = 0.451$, $p = 0.652$); gender [χ^2 (1) = 0.0, $p \geq 1.000$]; education level [χ^2 (5) = 8.963, $p = 0.111$]; and marital status [χ^2 (3) = 1.254, $p = 0.790$]. In terms of schooling, the UATI students presented higher levels compared to those in the comparison group [χ^2 (6) = 14.22, $p = 0.027$].

QOL of elderly students before and after attending the UATI and a comparative analysis with the group of non-students

The perception of each item of QOL obtained through the QdV-DA of elderly students *before and after* attending the UATI (at the beginning and end of the course year), are presented as frequencies and percentages in Table 1.

Table 1 – Frequencies of perceptions of each item of QOL obtained through QdV-DA of elderly students before and after attending the UATI (in absolute numbers and percentages)

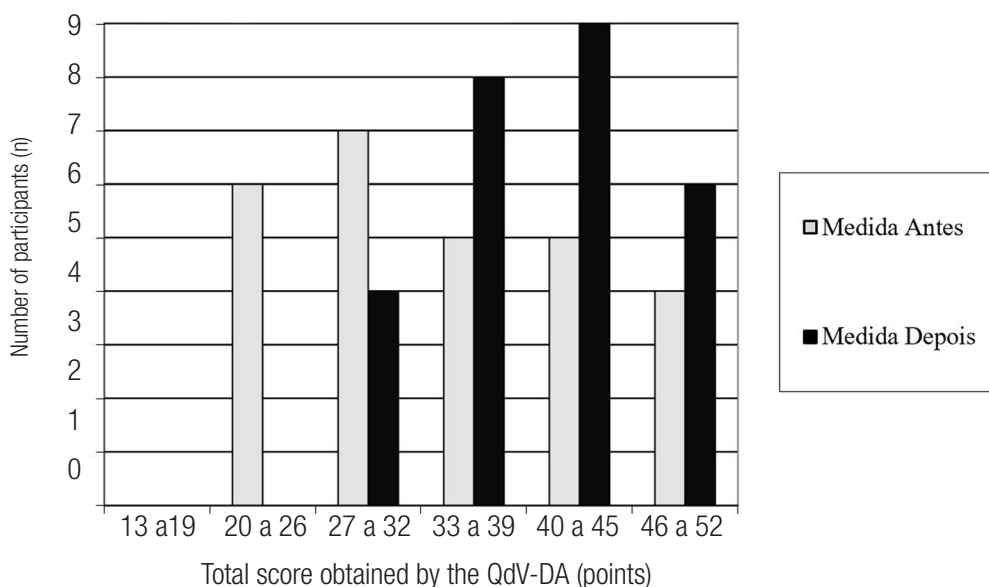
Dimensions of QOL	Perception / score							
	Poor/1		Moderate/2		Good/3		Excellent/4	
Collection in regard to intervention	Before (t ₀)	After (t ₁)	Before (t ₀)	After (t ₁)	Before (t ₀)	After (t ₁)	Before (t ₀)	After (t ₁)
	n	n	n	n	n	n	n	n
	%	%	%	%	%	%	%	%
1. Physical health	4	2	10	4	6	11	7	10
	14.8	7.4	37.0	14.8	22.2	40.7	25.9	37.00
2. Disposition	5	2	8	5	6	9	8	11
	18.5	7.4	29.6	18.5	22.2	33.3	29.6	40.7
3. Mood	3	2	1	2	18	13	5	10
	11.1	7.4	3.7	7.4	66.7	48.1	18.5	37.0
4. Residence	1	1	5	4	17	18	4	4
	3.7	3.7	18.5	14.8	63.0	66.7	14.8	14.8
5. Memory	8	2	7	3	3	9	9	13
	29.6	7.4	25.9	11.1	11.1	33.3	33.3	48.1
6. Family	4	2	4	5	11	12	8	8
	14.8	7.4	14.8	18.5	40.7	44.4	29.6	29.6
7. Marriage	2	1	5	5	8	8	12	13
	7.4	3.7	18.5	18.5	29.6	29.6	44.4	48.1
8. Friends	3	1	6	2	8	4	10	20
	11.1	3.7	22.2	7.4	29.6	14.8	37.0	74.1
9. You in general	5	2	7	6	9	9	6	10
	18.5	7.4	25.9	22.2	33.3	33.3	22.2	37.0
10. Tasks	5	2	5	4	10	9	7	12
	18.5	7.4	18.5	14.8	37.0	33.3	25.9	44.4
11. Leisure	4	2	10	5	8	12	5	8
	14.8	7.4	37.0	18.5	29.6	44.4	18.5	29.6
12. Money	3	2	17	17	2	3	5	5
	11.1	7.4	63.0	63.00	7.4	11.1	18.5	18.5
13. Life in general	3	2	12	3	10	17	2	5
	11.1	7.4	44.4	11.1	37.0	63.0	7.4	18.5

Source: research data.

t₀ = before attending the UATI; t₁ = after attending the UATI.

In terms of total QOL scores, the average was 34.96 points at the beginning of the course year (measured before; SD = 8.68, $x_{\min} = 22$, $x_{\max} = 51$) and 39.67 points at the end (measured after; SD = 6.97, $x_{\min} = 27$, $x_{\max} = 52$). Graph 1 presents the distribution of the number of subjects according to total QOL scores in each measurement. One should notice in this graph the movement of the sample to the right, toward higher scores after the intervention.

Graph 1 – Distribution of the number of observation-group participants according to the total points obtained through the QdV-DA at the beginning of the course year (*measured before*) and at the end of the course year (*measured after*)



Source: research data.

The results showed significant differences between the *before* and the *after* measurements of the following QOL items: physical health, disposition, mood, memory, friends, you in general, ability to carry out tasks, ability to carry out leisure activities, and life in general, as well as in the total QdV-DA scores. However, the items residence, family, marriage, and money did not present significant differences (Table 1).

The group of elderly students of the UATI did not present any differences in total QOL scores when compared with the control group in the first interview ($\chi^2 = 0.493$, $df = 1$, $p = 0.483$). However, at the second interview, the comparative assessment between the perceptions of QOL before and after the intervention (at the beginning and end of the course year) shows differences between the two groups ($\chi^2 = 7.448$; $df = 1$; $p = 0.006$). The total QOL scores of the UATI students had increased (Table 2).

Table 2 – Comparative statistical analyses of each dimension of total QOL score of participants of the groups according to total points obtained through the QdV-DA at the beginning of the course year (1st collection) and the end of the course year (2nd collection) by means of Wilcoxon test

Groups	Dimensions of QOL	Collection				Comparative analysis	
		1st Collection		2nd Collection		Z	p
		Average	SD	Average	SD		
UATI Students	Physical health	2.59	1.05	3.07	0.92	-3.127	0.002*
	Disposition	2.63	1.12	3.07	0.96	-2.972	0.003*
	Mood	2.93	0.83	3.15	0.86	-2.121	0.034*
	Residence	2.89	0.70	2.93	0.68	-0.577	0.564 ^{ns}
	Memory	2.48	1.25	3.22	0.93	-3.134	0.002*
	Family	2.85	1.03	2.96	0.90	-1.342	0.180 ^{ns}
	Marriage	3.11	0.97	3.22	0.89	-1.732	0.083 ^{ns}
	Friends	2.93	1.04	3.59	0.80	-3.140	0.002*
	You in general	2.59	1.05	3.00	0.96	-3.317	0.001*
	Ability to carry out tasks	2.7	1.07	3.15	0.95	-2.762	0.006*
	Leisure activities	2.57	0.98	3.96	0.90	-2.144	0.032*
	Money	2.33	0.92	2.41	0.89	-1.414	0.157 ^{ns}
	Life in general	2.41	0.80	2.93	0.78	-3.500	0.000*
	Total score	34.96	8.68	39.67	6.97	-4.541	0.000*
Non-UATI Participants	Physical health	2.56	0.93	2.37	1.01	-1.155	0.248 ^{ns}
	Disposition	2.70	0.83	2.56	0.80	-1.633	0.102 ^{ns}
	Mood	3.07	0.68	2.63	0.84	-2.814	0.005*
	Residence	2.81	0.62	2.85	0.72	-0.577	0.564 ^{ns}
	Memory	3.19	0.88	2.59	0.89	-3.358	0.001*
	Family	3.19	0.79	3.11	0.80	-0.707	0.480 ^{ns}
	Marriage	3.26	0.76	3.07	0.83	-1.633	0.102 ^{ns}
	Friends	2.74	1.06	2.52	0.98	-2.121	0.034*
	You in general	2.81	0.74	2.67	0.83	-2.000	0.046*
	Ability to carry out tasks	2.81	1.08	2.33	0.96	-3.357	0.001*
	Leisure activities	2.52	1.01	2.11	0.89	-2.810	0.005*
	Money	1.93	0.73	2.15	0.86	-1.732	0.083*
	Life in general	2.67	0.68	2.59	0.64	-1.000	0.317 ^{ns}
	Total score	36.26	7.22	33.56	7.42	-3.540	0.000*

ns = not significant.

* significant difference, $p < 0.05$.

Source: research data.

Discussion

According to the IBGE (2010), in 2009, the proportion of people aged 60 years or over with no schooling or with less than one year of education was 9.7%. However, among all of the participants, there was only one unschooled elderly person (1.8%) in the sample of students included in the present study and 44.4% (n = 24) had a high level of schooling (high school or college). This suggests that the sample does not generically represent the elderly of the community. The individuals who seek out UATIs have a higher level of schooling and belong to favorable socio-economic levels when compared to data of the general Brazilian population. This favorable condition is sustained by other authors (BARRETO et al., 2003; FENALTI; SCHWARTZ, 2003; IRIGARAY; SCHNEIDER, 2008a; IRIGARAY; SCHNEIDER, 2008b; LEITE et al., 2006; LOURES, 2001; LOURES et al., 2010; ORDONEZ; BATISTONI; CACHIONI, 2011; SWINDELL, 1990; YENERALL, 2003; ZIELIŃSKA-WIĘCZKOWSKA et al., 2012).

The profile of the UATI students in this study corroborates various studies that describe a young elderly person, with an average age of less than 75 years (ANDERSON et al., 1998; BARRETO et al., 2003; CASTRO et al., 2007; CIESLAK et al., 2007; FENALTI; SCHWARTZ, 2003; IRIGARAY, 2006; IRIGARAY; SCHNEIDER, 2008a; IRIGARAY; SCHNEIDER, 2008b; LEITE et al., 2006; LOURES, 2001; LOURES et al., 2010; ORDONEZ; BATISTONI; CACHIONI, 2011; PEREIRA, 2003; ROCHA et al., 2016; SONATI et al., 2011; SWINDELL, 1990; YENERALL, 2003), female (BARRETO et al., 2003; CACHIONI, 1998; CIESLAK et al., 2007; CRUZ, 2003; FENALTI; SCHWARTZ, 2003; HEBESTREIT, 2006; IRIGARAY, 2006; IRIGARAY; SCHNEIDER, 2008a; IRIGARAY; SCHNEIDER, 2008b; LEITE et al., 2006; LOESER, 2006; LOURES, 2001; LOURES et al., 2010; MACHADO, 2004; ORDONEZ; BATISTONI; CACHIONI, 2011; PEREIRA, 2003; ROCHA et al., 2016; SONATI et al., 2011; SWINDELL, 1990; WILLIAMSON, 2000; YENERALL, 2003; ZIELIŃSKA-WIĘCZKOWSKA et al., 2012).

With regard to the changes in total QOL scores, we note significant gains in the first year of intervention (+4.71 points; 9.05%). In general terms, the two sample groups presented high average QOL scores. This may have occurred due to the fact of those interviewed were functionally independent and autonomous. The favorable results do not conflict with the reviews of the literature (NETUVELI; BLANE, 2008), and we suppose that participation in UATI activities has a positive influence on individuals.

However, the methodological design does not allow a conclusive affirmation. There is the hypothesis that people with better conditions in the study variables tend to seek out interventions in order to improve their lives. Thus, this condition of the “superiority” of strategies would be intrinsic to individuals who seek out a UATI and not the result of participation in such a program. Cruz (2003) states that people with higher degrees of satisfaction were those with higher levels of schooling, with no relation to any participation in a UATI. In this study, we can see that even with the methodological effort to pair groups of UATI students with a comparison group on all socio-economic variables, this was not possible with regard to the levels of education, and this could have been an intervening variable.

However, many studies argue in favor of UATIs for fostering or at least maintaining the QOL of their students, and this study corroborates these data (BARRETO et al., 2003; FENALTI; SCHWARTZ, 2003; IRIGARAY; SCHNEIDER, 2008a; IRIGARAY; SCHNEIDER, 2008b; LEITE et al., 2006; LOURES, 2001; LOURES et al., 2010; ORDONEZ; BATISTONI; CACHIONI, 2011; SWINDELL, 1990; YENERALL, 2003; ZIELIŃSKA-WIEĆZKOWSKA et al., 2012).

With regard to the methodology, we hope that the rapidity and the facility of application of the instruments, as well as the possibility for them to be applied by any professionals, will encourage future studies to opt to use them to create parameters of comparison.

Conclusions

Considering the objective proposed for this study, the results presented permit the following preliminary conclusions: (a) once paired in terms of variables of gender, age, and level of social vulnerability, the elderly students of the UATI differ positively in terms of the schooling levels; (b) there is a difference between total scores of QOL of the elderly students of the UATI *before* and *after* the intervention (at the beginning and end of the course year), and this difference is positive; (c) the QOL of the non-students saw a decline, and there was a significant difference between their QOL and that found in the data collection after the intervention.

Given that the results show the trend that participation in the UATI program is favorable to the perceptions of QOL, we argue in favor of this type of intervention in terms of fostering or maintaining this perception. It is necessary that educational programs include the elderly, for this can be an important source of support for confronting another difficult stage of life. Thus, the stimulus and strengthening of partnerships between universities, educational, and professional foundations of various areas for offering these programs can minimize the difficulties of offering significant, pleasurable, and quality activities.

Through joint efforts, it will be possible to deliberate preventive measures and interventions that guarantee new feelings that are free from the stereotypes associated with aging. The development of activities that meet the more pessimistically perceived dimensions of and that strengthen the others to come together around an inclusive, flexible, and dynamic meaning that consider the value of the elderly's opinion. Psycho-educational interventions should support the optimization of knowledge and aptitudes providing encouragement so that older adults feel accepted and understood in their abilities, skills, difficulties, and limitations.

This study has methodological limitations such as the relatively small size of the sample, the specificity of time and place of the experience—which was carried out in a single city outside the capital of the State of São Paulo, and the difficulty of comparison with other studies on the same theme—for the assessment methods are very different between them; although these aspects may be viewed as vulnerabilities, this research is a part of the set of studies that contribute to broadening our knowledge on aging and the importance of offering educational programs aimed at the aged. For this reason, it is important that similar studies are conducted in other environments to overcome the

limitations of the present one. The results of such research would enable conceiving and planning social programs that meet the major needs of those involved in this *status quo*.

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