

Material domain and life satisfaction: Portuguese elderly people living alone

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Abstract

The material domain has an actual impact on people's life satisfaction. The way this occurs depends on the ideologies, which surround material possessions and money. This exploratory study aims to characterise the material domain profile (values, attitudes and behaviours towards money and material possessions) of elderly men and women living alone and how it affects their life satisfaction. A questionnaire was administered to a sample of 96 elderly men and women of low, middle and upper socioeconomic classes. Findings suggest that participants are moderately satisfied with life, tend to be non-materialistic and focus their money ethic and behaviour on budget and savings. Life satisfaction is not correlated with materialism or money ethics and behaviours; nevertheless, income is positively correlated with life satisfaction, particularly in the higher socioeconomic groups. This study suggests that old people are more attached to the symbolic and relational meanings of possessions.

Key-words: material domain; life satisfaction; older persons; gender; living arrangements.

Introdução

Material possessions (contents of the material domain) have traditionally been a field of economics, where money and material goods are viewed as an utilitarian commodity, having only a quantitative meaning. More recently, psychology and sociology have become interested in the material possessions field highlighting its emotional or meaningful representations. Life satisfaction, as a part of subjective well-being, refers to an overall assessment of an individual's quality of life based on one's criteria (Lucas, Diener, & Suh, 1996). Researchers have increasingly become interested in the impact of socioeconomic variables in life satisfaction (Schimmack, Diener, & Oishi, 2002). In fact, life satisfaction is functionally related to satisfaction with all of life's domains and subdomains (Sirgy, 1998). For instance, having material conditions to manage its own life is one of the main determinants of perceived quality of life indicated by the older persons (Borglin, Edberg, & Hallberg, 2005).

As other domains in life, the impact of the material domain on people's lives is mediated by other variables: the context in which material possessions are experienced, including socioeconomic class, gender, living arrangements (such as, living alone, with the family or at an institution) and material ideology (Diener & Seligman, 2004). Socioeconomic status has shown to have an impact on life satisfaction, for instance: individuals' incomes correlate positively with life satisfaction; however, the positive relation becomes modest once the poverty threshold is passed (Diener & Seligman, 2004); and those with higher incomes report higher levels of self-esteem, subjective happiness and satisfaction with life (Diener, 1984). Gender differences have also been found, for example (Lim & Teo, 1997; Tang, 1993): males place a higher value on money than females do; males are more likely to use money as a tool to influence (power) and impress (prestige) others; females do more financial planning. These findings, associated with a longer life expectancy for women, and with the different social roles attributed to men and women regarding money and material possessions (he is the breadwinner while she assumes the home financial management), support the need to compare both genders. Elderly people living alone reveal great concerns about their future (compared to those living in a family). Those concerns relate mainly to economic issues: the elderly depend on their retirement pension, having no other possibility of obtaining further income, since they cannot work; and, usually, they lack support to manage their money and fear being unable to take the best profit from what they have.

The material domain has impact on people's life, but how it occurs depends in particular on the ideologies regarding material possessions and money and how they are translated into behaviour. These variables were initially developed and studied in organisational contexts; more recently, studies have been carried out to characterise individuals in different life stages. However, the elderly remains a less studied age group. Material domain ideology includes the following as relevant variables (Belk, 1985; Kirkcaldy & Furnham, 1993; Mitchell & Mickel, 1999): materialism (value / symbolic), money ethics (affective) and behaviours (conduct).

Materialism

Materialism is a condition in which the material life domain is considered to be highly salient relatively to other life domains (Richins, 2004). In this study, we have adopted the definition of materialism as a value, since our study focuses mainly on ideology. Richins (2004) defines materialism as a system of personal values. Values are enduring beliefs about what is fundamentally important. Research has consistently showed that materialism relates negatively to satisfaction with many life domains (Diener & Seligman, 2004; Richins & Dawson, 1992; Roberts & Clement, 2007). However, most of the studies do not focus on elderly persons. Materialistic people (compared to non-materialistic) have been described as (Diener & Seligman, 2004): putting material possessions in such a central place in their lives that they are believed to provide the greatest sources of dis/satisfaction; being responsive to externals (appearance and prestige), self-centered (less generous, less caring about relationships) and less satisfied with life; being less apt to share, and in general seem to suffer from poor adjustment (less empathy, less intrinsic motivation, and more conflictual relationships); having more symptoms of depression and anxiety.

Money ethics and behaviours

Money is a multidimensional construct involving a rational-affective nature: it is instrumental as well as symbolic in and of itself (Mitchell & Mickel, 1999; Roberts & Sepulveda, 1999). Although money is an object, it has subjective and affective meanings. Satisfaction with most aspects of one's life is consistently related to one's financial holdings. Furthermore, research shows that the absolute amount of money that one has, as well as relative comparisons, contribute to satisfaction with life. Studies have highlighted the influence of some variables in attitudes towards money (e.g., Mitchell & Mickel, 1999; Roberts & Sepulveda, 1999): i) personal attributes - people who value money highly and take risks have higher scores in attributes like sensation seeking, competitiveness and control; ii) personality measures - people who are desirous of money and think money is good, often have high self-esteem and a high need for achievement; iii) gender – women tend to budget less, whereas men seem to manage and value money more; iv) age - as people get older, they tend to budget more and see money in a less negative way v) education - better-educated people feel they have more control over money.

Objectives

This exploratory study aims to characterise the material domain profile (values, attitudes and behaviours towards money and material possessions) of elderly men and women living alone and how it affects their life satisfaction. In fact, ageing studies rarely focus on the material domain. Understanding old people's values, attitudes and behaviours towards money and material possessions

may contribute to understand how they are facing the challenges related to the material domain. As other domains in life, material domain is important in pursuing active and successful ageing.

Methodology

Instruments

This exploratory study (descriptive and correlational) is based on a questionnaire that comprises the following variables and scales / questions.

Sociodemographic: age, gender, marital status, number of children, residence area (rural / urban).

Socioeconomic class (Graffar Index, 1956; Portuguese version, Amaro, 1990): The Graffar Index is an international classification established by Graffar (1956). It uses five criteria (education, occupation, income, household and neighbourhood characteristics) to define the family/individual socioeconomic class. The sum of the points obtained in each of the 5 criteria indicates the socioeconomic class: upper class, 5 to 9 points; upper-middle, 10 to 13 points; middle, 14 to 17 points; low-middle, 18 to 21 points; low, 22 to 25 points.

Functional status (Barthel Index; Mahoney & Barthel, 1965): The Barthel Index has been widely used to examine aged people's functional alterations. It consists of 10 items that measure a person's daily functioning. The items include feeding, moving from wheelchair to bed and return, grooming, transferring to and from the toilet, bathing, walking on a level surface, going up and down stairs, dressing, as well as bowel and bladder continence. Each activity is scored in steps of five points (0 - unable; 5 - needs help; 10 - independent) to give a maximum total score of 100 (highest scores mean higher independency). The instrument has shown high levels of internal consistency (Cronbach's alpha = 0.92 in the original version).

Perception of monthly income: "How is your income by the end of the month?" 1 – not enough; 2 – sufficient; 3 – more than enough.

Life satisfaction (Satisfaction with Life Scale, SWLS; Diener, Emmons, Larsen, & Griffin, 1985; Portuguese version, Simões, 1992): The SWLS is a global measure of life satisfaction, consisting of 5 items. In the original version respondents should answer using a 7-point Likert scale; in this study, the Portuguese version (Simões, 1992) was used, and answers were scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), in which higher scores mean a higher satisfaction with life. The factorial analysis of the Portuguese version reveals one factor, as in the original version, and the internal consistency is good (Cronbach's alpha = 0.77) (Simões, 1992). In this study, the Cronbach's alpha is 0.83.

Isolation indicators: Three indicators were used: i) social isolation was assessed by the size of the social network; respondents were asked to indicate the number of significant people in their life, with whom they were in contact during the last year; ii) loneliness, respondents were asked to say how often they feel lonely, and the answers were rated on a 3-point Likert scale ranging from 1 (almost never) to 3 (almost always); iii) depression was assessed using four items of the Geriatric Depression Scale, which are also used in the EASY-care, showing good psychometric properties (Chronbach's alpha equal to 0.89; Sousa & Figueiredo, 2003).

Materialism (Material Value Scale, 9-item version, MVS, Richins & Dawson, 1992; Portuguese version, Patrão & Sousa, 2008): Materialism is defined as the devotion ascribed to the ownership and acquisition of material goods in achieving major goals or desired states. The scale measures three components of materialism (Richins & Dawson, 1992): i) centrality, acquisition as the central goal in life; ii) happiness, acquisition as the key to happiness; iii) success, success in life defined by possessions. In this study, the 9-item MVS version was used, comprising three subscales (each consisting of 3 items) designed to tap into each of those components. A 5-point Likert scale response format was used; higher scores indicate stronger materialistic value endorsement. The internal consistency in this version is good: Cronbach's alpha = 0.82 (Richins, 2004). The Portuguese version (Sousa & Patrão, 2014) also found a three-factor solution with lower internal consistency: Cronbach's alpha = 0.67. In this study, the Cronbach's alpha is as follows: global scale = 0.78; success = 0.69; centrality = 0.63; happiness = 0.79.

Money attitudes (short 12-item Money Ethic Scale, MES, Tang, 1995; Portuguese version, Sousa & Patrão, 2014): the MES was used to measure people's attitudes towards money (Tang, 1995). The scale comprises three factors: success (8 items), the cognitive component (money represents achievement, power and freedom); budget (2 items), the behavioral component (money is used and managed carefully); evil (2 items), the affective component (money is bad and perverse). Responses were based on a 5-point Likert scale. The overall money score (with factor evil reverse scored) represents people's general and positive attitudes towards money. The internal consistency in this 12-items version is good: Cronbach's alpha = 0.82 (Tang, 1995). The Portuguese version also comprises 3 factors with lower internal consistency: Cronbach's alpha = 0.63 for the global scale. In this study the Cronbach's alpha is as follows: global scale = 0.65; success = 0.79; budget = 0.81; evil = 0.82.

Money behaviours (Money Beliefs and Behavior Scale, MBBS, Furnham, 1984; Portuguese version, Sousa & Patrão, 2014): In this study 6 items of the MBBS were used to measure money-related behaviours. These items measure three behaviours (2 items each): i) anxiety, the extent to which individuals think and worry about money; ii) budget, reflects respondents' saving habits and their ability to budget money; iii) non-generosity, reflects the extent to which one is non-generous in terms of contribution to charity and lending money to others. A 5-point Likert scale response format was used. Higher scores indicate greater emphasis on the assessed money behaviours. The internal consistency in the original version is good: Cronbach's alpha \geq 0.60 (Furnham, 1984). The Portuguese version found 3 factors with higher internal consistency: Cronbach's alpha = 0.71 for the global scale.

In this study the Cronbach's alpha is: global scale = 0.65; budget = 0.71; anxiety = 0.66; non-generosity = 0.50.

Procedures

The participants were identified through community institutions (day care, senior universities). Authorisation was requested from the institutions to carry out the study. A professional designated by the institution was responsible for mediating the identification of participants. The professional was informed about the inclusion criteria (people aged over 64, living alone without cognitive impairments), and the participants fulfilling the criteria were then approached in order to be provided with a brief explanation of the project.

Those professionals contacted potential participants and explained the objectives and what would be expected of them when participating; they were asked for permission to be contacted by the researchers. All the participants who had been contacted previously agreed to take part in the study and signed the informed consent form. The questionnaire was administered by interview, carried out by the authors. Each interview lasted between 30 and 75 minutes. The sample was collected in several districts within the north and central areas of Portugal, including the littoral (urban) and the interior (rural) areas.

Sample

The sample was organised allowing every class to have the same number of participants, with a similar number of men and women. The sample consisted of 96 participants (table 1): 32 participants were from low to low-middle class (designated as lower class) with an equal number of men (16) and women (16); 32 participants were middle class, 16 men and 16 women; 32 participants belonged to the upper- and upper-middle class (designated as the upper class group), 17 were women and 15 were men.

The results of the functional status assessment reveal that 96.9% of participants are independent. The mean age of the sample is 75.2, similar for both male and female participants. However, participants belonging to the upper class are significantly younger than those in the other socioeconomic groups. The mean number of children is 2.1, for both men and women. However, upper-class individuals have a significantly lower number of children than middle-class individuals. Men and women share a similar perception of the monthly income. However, upper-class individuals indicated a significantly higher perception of the monthly income. The results for the education level, residence area and marital status are equally distributed between men and women. Concerning the differences among the different social classes the following was observed: i) there is a higher number of divorced and single individuals belonging to the upper class, as well as a lower number of widows;

ii) upper-class individuals tend to reside in urban areas, whereas lower-class individuals tend to reside in rural areas; iii) the upper class group presents a higher number of individuals with higher levels of education.

Table 1. Sample

	Male		Female		Lower class		Middle class		Upper class		Total	
	n=47	%	n=49	%	n=32	%	n=32	%	n=32	%	N=96	%
Marital status												
Married	1	2.1	0	-	1	3.1	0	-	0	-	1	1.04
Divorced	7	14.9	2	4.1	1	3.1	1	3.1	7	21.9	9	9.4
Single	5	10.6	9	18.4	4	12.5	2	6.3	8	25	14	14.6
Widow	34	72.3	38	77.6	26	81.3	29	90.6	17	53.1	72	75
Residence												
Rural	26	55.3	23	46.9	31	96.9	21	65.6	0	-	49	48.9
Urban	18	44.7	29	53.1	1	3.1	11	34.4	32	100	47	51.1
Education												
No schooling	2	4.3	3	6.1	4	12.5	1	3.1	0	-	5	5.2
Primary	29	61.7	23	46.9	25	78.1	25	78.1	2	6.3	52	54.2
5 to 6 years	2	4.3	8	16.3	1	3.1	6	18.8	3	9.4	10	10.4
7 to 9 years	4	8.5	4	8.2	2	6.3	0	-	6	18.8	8	8.3
Secondary	2	4.3	4	8.2	0	-	0	-	6	18.8	6	6.3
Superior	8	17.0	7	14.3	0	-	0	-	15	46.9	15	15.6
Age, Children and Income												
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Age	75.7	7.4	74.8	6.9	77.6	7.3	76.4	7.3	71.6	5.2	75.2	7.1
Number of children	2.1	1.6	2.1	2.3	2.0	1.9	2.8	2.4	1.6	1.4	2.1	1.9
Perception of income	2.5	0.7	2.4	0.7	2.25	0.7	2.2	0.8	2.9	0.5	2.4	0.7

M=Mean; SD= Standard-deviation

Statistically significant differences:

Age: the mean age of upper-class participants is significantly lower when compared to the mean age of lower-class ($t=3.828$; $p=0.0003$) and middle-class ($t=-3.065$; $p=0.0033$) participants.

Number of children: the mean number of children for the upper class is significantly lower compared to the mean number of children for the middle class ($t=-2.45$; $p=0.0174$).

Perception of the monthly income: the mean score for the upper-class respondents is significantly higher than the mean score for the lower class ($t=4.293$; $p=0.0001$) and the middle class ($t=4.086$; $p=0.0002$).

Distribution of classes by marital status ($\chi^2 (6) = 17.2$; $p=0.008$), area of residence ($\chi^2 (2) = 63.0$; $p=0.000$) and education ($\chi^2 (10) = 78.3$; $p=0.000$).

Results

Life satisfaction

The mean life satisfaction is 15.62 (moderate satisfaction); life satisfaction shows no significant differences between men and women (table 2). Participants coming from the lower class are

significantly more dissatisfied with life compared to those from the upper class. Middle-class participants show intermediate scores. Increased life satisfaction is associated with (moderate, positive and significant correlations): the education level ($r=0.231$; $p \leq 0.05$), the size of the social network ($r=0.308$; $p \leq 0.05$) and the perception of the monthly income ($r=0.220$; $p \leq 0.05$).

Table 2. Materialism, money ethics and behaviours and life satisfaction (means)

	Male		Female		Lower class		Middle class		Upper class		Total	
	n=47	%	n=49	%	n=32	%	n=32	%	n=32	%	N=96	%
Marital status												
Married	1	2.1	0	-	1	3.1	0	-	0	-	1	1.04
Divorced	7	14.9	2	4.1	1	3.1	1	3.1	7	21.9	9	9.4
Single	5	10.6	9	18.4	4	12.5	2	6.3	8	25	14	14.6
Widow	34	72.3	38	77.6	26	81.3	29	90.6	17	53.1	72	75
Residence												
Rural	26	55.3	23	46.9	31	96.9	21	65.6	0	-	49	48.9
Urban	18	44.7	29	53.1	1	3.1	11	34.4	32	100	47	51.1
Education												
No schooling	2	4.3	3	6.1	4	12.5	1	3.1	0	-	5	5.2
Primary	29	61.7	23	46.9	25	78.1	25	78.1	2	6.3	52	54.2
5 to 6 years	2	4.3	8	16.3	1	3.1	6	18.8	3	9.4	10	10.4
7 to 9 years	4	8.5	4	8.2	2	6.3	0	-	6	18.8	8	8.3
Secondary	2	4.3	4	8.2	0	-	0	-	6	18.8	6	6.3
Superior	8	17.0	7	14.3	0	-	0	-	15	46.9	15	15.6
Age, Children and Income												
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Age	75.7	7.4	74.8	6.9	77.6	7.3	76.4	7.3	71.6	5.2	75.2	7.1
Number of children	2.1	1.6	2.1	2.3	2.0	1.9	2.8	2.4	1.6	1.4	2.1	1.9
Perception of income	2.5	0.7	2.4	0.7	2.25	0.7	2.2	0.8	2.9	0.5	2.4	0.7

Significant differences:

Life satisfaction: upper class individuals are significantly more satisfied with life than their lower class counterparts ($t=2.083$; $p=0.043$).

Materialism: upper class individuals have statistically higher centrality scores than lower ($t=2.849$; $p=0.0058$) and middle class ($t=2.154$; $p=0.0353$) individuals.

Money ethics: i) budget management achieved a statistically higher mean score, compared with the global scale ($t=7.757$; $p=0.000$), success ($t=8.752$; $p=0.000$) and perversity ($t=11.549$; $p=0.000$); ii) women scored significantly higher than men on the perversity factor ($t=-2.617$; $p=0.0103$); iii) the upper class group achieved a significantly lower score on the budget management factor when compared with the lower ($t=-8.704$; $p=0.000$) and the middle class ($t=-7.839$; $p=0.000$) groups; iv) upper class individuals had lower mean scores on the perversity factor, compared with those from lower ($t=-2.817$; $p=0.0069$) and middle class ($t=-2.745$; $p=0.008$) individuals.

Money behaviours: i) the mean score for money saving is significantly higher than that for the anxiety ($t=11.521$; $p=0.000$) and non-generosity ($t=5.016$; $p=0.000$) factors; ii) non-generosity was rated with a significantly higher mean score than anxiety ($t=-6.452$; $p=0.000$); iii) lower-class individuals rated budget with a higher score than anxiety ($t=9.22$; $p=0.000$) and non-generosity ($t=4.172$; $p=0.000$); non-generosity was rated higher than anxiety ($t=-5.557$; $p=0.000$); iv) in the middle class group, budget was rated with a higher score, compared with anxiety ($t=7.365$; $p=0.000$) and non-generosity ($t=5.24$; $p=0.000$); non-generosity was rated higher than anxiety ($t=-2.062$; $p=0.043$); v) upper class individuals rated money saving significantly lower than anxiety ($t=5.214$; $p=0.000$); non-generosity was rated significantly lower than anxiety ($t=5.535$; $p=0.000$); vi) the upper class group has a significantly lower score on budget, compared with the mean scores for the lower class ($t=6.778$; $p=0.000$) and the middle class ($t=-5.769$; $p=0.000$) groups; vii) lower class individuals have a higher mean score on anxiety than their upper class counterparts ($t=2.867$; $p=0.0061$), and a higher mean score on the non-generosity factor, compared with upper class ($t=4.095$; $p=0.000$) and middle class ($t=3.014$; $p=0.0038$) individuals.

At the same time, life satisfaction tends to decrease (moderate, negative and significant correlations) with the tendency towards depression ($r=-0.624$; $p\leq 0.01$) and with the perception of loneliness ($r=-0.359$; $p\leq 0.01$). Age, marital status, the area of residence and the number of children do not seem to influence life satisfaction levels in this sample. Those who are more satisfied with life tend to belong to the upper class and have a better perception of the monthly income; they are usually men, have a higher educational level and larger social networks; they do not show tendency towards depression and do not feel lonely.

Materialism

The mean scores for the global scale of materialism and each of its factors vary between 2.51 (centrality) and 2.67 (success), suggesting a low-moderate attachment to material possessions (table 2). There are no significant differences between men and women; both men and women rate the success factor higher than the other two factors, namely centrality and happiness, which are rated with similar values. However, men have slightly higher mean scores on the global scale and on each of the three factors.

The lower and middle classes have the highest mean scores for success, while the upper class has a significantly higher centrality score, indicating that the possession and the acquisition of things assume a central place in the lives of upper-class participants; yet no significant differences were found. Results suggest that there is a significant positive correlation between the level of education and the centrality factor ($r=0.243$; $p\leq 0.05$); individuals with high levels of education usually belong to the upper class, the group with the highest centrality score. There is a significant negative correlation between the perception of the monthly income and the happiness factor ($r=-0.265$; $p\leq 0.01$), indicating that the individual's perception of income determines whether or not the individual believes that happiness and well-being depend on the acquisition and possession of material things.

Money ethic

The global sample means (3.4) suggest that participants have positive attitudes towards money. Results indicate that money ethics is associated with budget management, since the mean score obtained in this factor is significantly higher than the mean score obtained in the success and perversity factors (2.6) (table 2). Both men and women place more value on the behavioural aspect of money, meaning that the budget factor has the highest mean score, followed by success (cognitive component) and evil (affective component). Compared to men, women have a significantly higher mean score on the evil factor, suggesting that women are more likely to associate money with something bad or perverse. The three social classes show similar mean scores in the global scale.

The upper class has significantly lower mean scores than the other classes in “budget management” and “perversity”.

There is a significant and moderate negative correlation between the level of education and perversity ($r=-0.226$; $p\leq 0.05$), and also between the education level and budget management ($r=-0.576$; $p\leq 0.01$); compared to residents in rural areas, residents in urban areas have statistically lower mean scores on budget management ($t=6.196$; $p=0.000$). There is a significant and moderate positive correlation between age and budget management ($r=0.227$; $p\leq 0.05$), and between the number of children and perversity ($r=0.213$; $p\leq 0.05$).

Money behaviours

In the global sample, the mean score for the total scale is 3.29, indicating a moderate preoccupation with money behaviours (table 2). The mean score obtained in the money saving factor is significantly higher than the score obtained in the non-generosity and anxiety factors. Thus, budget is followed by non-generosity, which obtained a significantly higher mean score than anxiety.

The results show that both men and women have similar money behaviours. All the social groups have organised factors similarly to the global sample: first budget, followed by non-generosity and, finally, anxiety. Even though budget has reached the highest mean score in every socioeconomic class, its mean is significantly lower in the upper class group. The lower class group obtained the highest score in anxiety (significantly higher than the upper class), indicating that lower-class participants worry more about money than middle- and upper-class participants. Lower-class participants are significantly less generous than their middle- and upper-class counterparts.

The education level is negatively correlated with money saving ($r=-0.491$; $p\leq 0.051$) and the global scale ($r=-0.389$; $p\leq 0.01$), meaning that people who have higher levels of education are less likely to value money saving and any other money behaviours. People who reside in rural areas, usually coming from the lower class, obtained significantly higher mean scores in the saving factor ($t=4.937$; $p=0.000$), as well as in the anxiety factor ($t=2.254$; $p=0.0265$). The positive correlation between the number of children and anxiety ($r=0.238$; $p\leq 0.05$), and also between the number of children and the global scale ($r=0.236$; $p\leq 0.05$), indicates that those who have more children are more anxious and worry more about money behaviours. The perception of income is negatively correlated with anxiety ($r=-0.258$; $p\leq 0.05$), suggesting that those who have the perception of a lower income feel more anxious about money. A positive correlation has been found between budget and age ($r=0.209$; $p\leq 0.05$).

Life satisfaction versus materialism, money ethics and money behaviours

Lower and non-significant correlations were found between life satisfaction and materialism, as well as between life satisfaction and money ethics and behaviours (table 3). There is a strong correlation

(not significant) between life satisfaction and materialism for women, both in the global scale and in each of the different factors. A low correlation has been observed between life satisfaction and money ethics and behaviours for both men and women. Taking into consideration the socioeconomic groups, two moderate and significant correlations were observed: i) in the middle class group, life satisfaction is correlated with success (money ethics); ii) in the upper class group, there is a negative correlation between life satisfaction and anxiety.

Table 3. Life satisfaction, materialism, money ethics and behaviours: correlations

	Male		Female		Lower class		Middle class		Upper class		Total	
	n=47	%	n=49	%	n=32	%	n=32	%	n=32	%	N=96	%
Marital status												
Married	1	2.1	0	-	1	3.1	0	-	0	-	1	1.04
Divorced	7	14.9	2	4.1	1	3.1	1	3.1	7	21.9	9	9.4
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Widow	34	72.3	38	77.6	26	81.3	29	90.6	17	53.1	72	75
Residence												
Rural	26	55.3	23	46.9	31	96.9	21	65.6	0	-	49	48.9
Urban	18	44.7	29	53.1	1	3.1	11	34.4	32	100	47	51.1
Education												
No schooling	2	4.3	3	6.1	4	12.5	1	3.1	0	-	5	5.2
Primary	29	61.7	23	46.9	25	78.1	25	78.1	2	6.3	52	54.2
5 to 6 years	2	4.3	8	16.3	1	3.1	6	18.8	3	9.4	10	10.4
7 to 9 years	4	8.5	4	8.2	2	6.3	0	-	6	18.8	8	8.3
Secondary	2	4.3	4	8.2	0	-	0	-	6	18.8	6	6.3
Superior	8	17.0	7	14.3	0	-	0	-	15	46.9	15	15.6
Age, Children and Income												
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Age	75.7	7.4	74.8	6.9	77.6	7.3	76.4	7.3	71.6	5.2	75.2	7.1
Number of children	2.1	1.6	2.1	2.3	2.0	1.9	2.8	2.4	1.6	1.4	2.1	1.9
Perception of income	2.5	0.7	2.4	0.7	2.25	0.7	2.2	0.8	2.9	0.5	2.4	0.7

Discussion

The results suggest that elders who live alone (men and women from different socioeconomic backgrounds) are not materialistic, have a positive attitude towards money, as they tend to focus on budget management, and organise their money behaviours around money saving.

The results indicate that there is limited attachment to acquisition and possession of material things, probably due to the fact that possessions assume a more symbolic and relational value at this stage of life. In fact, studies portray older people as attached to their favourite things (more than younger persons), yet that attachment is associated with two main functions of material possessions in old age (Csikszentmihalyi & Rochberg-Halton, 1981; Hunter & Rowles, 2005): i) identity, related to life review, in which possessions usually represent family and other interpersonal ties, and relevant

moments in life; ii) legacy, the possibility of passing something on to the next generation, which may enable them to transcend any discomfort with the idea of death.

Results also suggest that elders who live alone have a positive attitude towards money and focus on budget management, organising their money behaviours mainly around money saving. Previous findings regarding the age-money attitude relationship have yielded fairly consistent results (e.g., Tang, 1995; Tang & Gilbert, 1995): older people are more likely to report higher levels of financial planning and budget their money. Money seems to have an instrumental value, i.e., it guarantees safety, well-being and care.

Study results do not show gender variations. However, they also suggest that women are more likely to associate money with something perverse. This means that there is a link between men's and women's ideologies and behaviours in old age, as opposed to the differences found at other stages in their lives: for example, during middle life women are less likely to attribute a utilitarian meaning and more likely to attribute comfort functions to possessions than men.

Taking into account the different social classes, similar values, attitudes and behaviours were observed in the middle and lower class groups, except for non-generosity, which was rated higher in the lower class group, compared with the middle class. Different results were found in the upper class group: higher levels of centrality (materialism), low budget emphasis and decreased emphasis on perversity (ethics); less focus on money behaviours (money saving, anxiety and non-generosity). Thus, findings suggest that upper class individuals are less likely to focus on money behaviours. Lower class individuals reported higher levels of anxiety towards money, probably because the lack of money requires very careful management.

There seems to be no correlation between the studied variables and life satisfaction, although some differences were found in other life stages. Such results may be explained by the moderate levels of materialism found or the redefinition of materialism in old age. Tornstam (1997) introduced the concept of gerotranscendence showing that materialism tends to decrease with age, whereas life satisfaction tends to increase due to a stronger sense of spirituality.

Neither financial ethics nor behavioural aspects (budget management) seem to be associated with life satisfaction, even though participants are strongly identified with money management. The same occurs with money behaviours: budget (savings), the most rated behaviour among participants, is also not strongly correlated with life satisfaction. There are only two significant correlations in our study. In the lower class group, there is a correlation between life satisfaction and success (money ethics), meaning that the more individuals associate money with achievement, power and freedom, the more satisfied they are with their lives. This seems to entail a contradiction: if individuals have less money, the association between money and success should indicate lower life satisfaction. However, this result should be interpreted within the social context of the Portuguese society (Gil, 2005): most of the elderly population currently living in Portugal spent their childhood and part of their adult lives living under a dictatorship; at that time, the poor were workers without money, and the rich were those who offered the poor low paid jobs; because of this, being rich or having money often has a negative social

connotation, mainly among the lower or middle class elders. In the upper class, there is a negative correlation between anxiety in money behaviours and life satisfaction: people with more money are more likely to be afraid of being deceived or not knowing how to manage their money, especially if they are alone.

Findings show that income is associated with life satisfaction: there is a moderate, but significant, positive correlation between the perception of the monthly income and life satisfaction, mainly in the upper class group. Thus, upper class individuals, who have a higher perception of the monthly income, are more satisfied with life than their lower and middle class counterparts; the lower class group has the lowest life satisfaction mean score of the three groups, despite being statistically similar to that of the middle class.

Limitations and research perspectives

The main limitation in this study is the sample size, which should be larger to ensure better accuracy of results. This study adopts a quantitative approach that needs to be combined in the future with qualitative approaches to get a deeper understanding of the meanings that the elderly attribute to the variables involved. Also other living arrangements should be studied, for instance elders living in institutions, those living in couple and with extended family.

Conclusions

The values and the meanings which are associated with material possessions tend to change throughout the life cycle. Personal possessions play a fundamental role in the construction of integrity during ageing, as they contribute to the continuity of the self and the preservation of a sense of identity (Csikszentmihalyi & Rochberg-Halton, 1981; Gentry, Baker, & Kraft, 1995). Older persons tend to use material possessions to negotiate life reviews and to extend themselves temporally into the future by giving special possessions to younger family members. Participants in this study were elders living alone who reported general life satisfaction. In old age, the preoccupation with money and possession management is an essential aspect in any intervention programme that might aim to support successful active ageing.

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