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Temporal changes in importance of quality of life domains: a longitudinal study in community-dwelling Swiss older people

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CONFLICT OF INTEREST

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ABSTRACT

Purpose: Population ageing is a global phenomenon requiring interventions to improve quality of life (QoL), a subjective and dynamic concept. Such interventions should be based on QoL domains considered as important from older people's viewpoint. It is unclear whether and how much these domains may vary over time as people age. This study aims to assess the importance of QoL domains, their pattern and determinants of change among the non-institutionalized older population over a five-year period.

Methods: This longitudinal study included community-dwelling older adults (N=1947, aged 68-77 years at baseline) from the Lausanne cohort 65+. In 2011 and 2016, participants rated the importance of 28 QoL items in seven domains. The difference between scores (0-100) of importance attributed to each QoL domain between two assessments was calculated and used as a dependent variable to assess the associations with covariates in multivariable analysis for each domain.

Results: Importance scores slightly but significantly decreased in five of the seven QoL domains. Despite the majority of participants did not modify their ranking of importance for each QoL domain between the two time points, the proportion of change was still substantial. Bivariate and multivariable analyses showed that education and to a lesser extent age, living arrangement and morbidity, were associated with decrease in the importance of specific QoL domains; characteristics indicating vulnerability (e.g. low education or morbidity) were associated with a decline in the importance.

Conclusion: Although aging individuals modified the importance they give to the seven QoL domains, at population level, changes in opposite directions overall resulted in only small decline; importance seems less stable over time among individuals with vulnerable sociodemographic and health profiles.

Keywords: quality of life; importance; older people; longitudinal study.

INTRODUCTION

Population ageing is a global phenomenon with an accelerating pace. Projections indicate that the proportion of persons aged 60 years or over will increase from 12.3% in 2015 to 16.5% in 2030 worldwide; this phenomenon is poised to have implications for almost all sectors of society [1] leading to interest in interventions to add quality to extended years of life in older people [2]. To achieve this aim, it would be critical to gain better insight on domains that are considered important for the quality of life (QoL) in older persons.

There is no consensus on the definition of QoL [3]; indeed, since QoL is a multidimensional and subjective concept covering domains of varying importance to different people [4]. Furthermore, assessment of QoL results from the dynamic interaction between external conditions and internal perceptions of those conditions [5]. As these conditions may vary over time, the importance of specific domains may not necessarily remain static for a given individual [6] and, accordingly, the respective weights and importance individuals attach to these domains may also change in varied phases of life [4]. Also, in assessing change in QoL, such variability can lead to the so-called 'response shift' phenomenon referred as a change in the respondent's internal standards (recalibration), values (change in the importance of the component domains or reprioritization) or conceptualizations (redefinition of the concept of QoL) which then affects perceived QoL [7-9]. Studies showed that changes in health related QoL were underestimated when response shift was not taken into account [10-13]. Hence, questions arise not only over how important the domains of QoL are but also the extent to which their importance change with time.

The difference and change in importance of QoL have been studied in clinical settings (referred as between patients variation[14] and within patients variation [6] or reprioritization [8], respectively) and only regarding health-related aspect of QoL, which have been long used as outcomes in the evaluation of

health and social care interventions [15,16,2]. To our knowledge, studies investigating the change in importance or so-called reprioritization of QoL domains – broadly defined – are still lacking among non-institutionalized older people. Thus, this study aimed 1) to measure the importance of QoL domains at two time points; 2) to assess the change in the importance of each domain over five years; and 3) to examine the determinants of change in the importance of each domain.

MATERIALS AND METHODS

Study population and design

This is a longitudinal study using data drawn from the Lausanne cohort 65+, an observational cohort study investigating age-related frailty among persons aged 65 years and over living in Lausanne, Switzerland. Detailed descriptions of the study design have been reported elsewhere [17]. Two representative samples of the community-dwelling population of Lausanne city enrolled at the age of 65 to 70 in 2004 and 2009 were drawn. The current study focuses on surviving, non-institutionalized, participants still living in Lausanne, without cognitive impairment in 2011 and who completed both 2011 and 2016 assessments in person (i.e. only self-reports were included and proxy-reports were excluded)~~.~~ **(supplementary figure 1**). The two samples were combined; in 2011 from the initial 3053 participants, 2459 (80.5%) were eligible for the 2011 assessment of QoL. In 2016, 1947 (79.2% of participants eligible in 2011) were still eligible and had complete data. The protocol was approved by the Ethics Committee of the Faculty of Biology and Medicine of the University of Lausanne (Protocol No. 19/04).

Data collection

All the data required for the current study (sociodemographic, health and quality of life related data) were collected through a postal questionnaire [18].

Sociodemographic and health related measures

Socio-demographic data included gender, age groups in 2011 (68-72 years vs. 73-77 years), educational level categorized, based on the International Standard Classification of Education (ISCED) [19], as low (obligatory school or ISCED 0-2), medium (apprenticeship or ISCED 3) or high (college, university degree or equivalent or ISCED 4-8), and living arrangement in 2011 (alone vs. not alone). For morbidities in 2011, the participants were asked whether they suffered from or received treatment for any of 12 selected health conditions or diseases diagnosed by a physician over the last 12-month period: hypertension, myocardial ischemia, other heart disease, stroke, diabetes, chronic lung disease, asthma, osteoporosis, arthrosis or arthritis, malignant neoplasm, ulcer and Parkinson's disease. The number of reported medical diagnoses was further categorized into three groups ("zero", "one", "two or more").

Importance of QoL domains and its change

In 2011 and 2016, the same 28-item questionnaire reflecting the convergence of health, social, cultural and economic factors was filled by participants to assess the importance of each item on their QoL **(supplementary table 1**). Participants were asked to rate the importance of each item (0 = very low; 1 = quite low; 2 = quite high; 3 = very high). A factorial structure, consisting of seven QoL domains, was previously explored and validated with sufficient internal consistency within each domain; the seven domains include "Material resources", "Close entourage", "Social & cultural life", "Esteem & recognition", "Health & mobility", "Feeling of safety" and "Autonomy" [18]. The importance score of each domain at both study time points was computed through summing up the ratings of constituent items, dividing by the maximum possible score (number of constituent items multiplied by three), and then multiplying by 100 to obtain a score ranging from 0 to 100, with higher scores indicating higher importance. The importance scores for QoL domains with more than one missing constituent item within each domain were treated as missing. The difference between importance scores of QoL domains in two assessments

was calculated by subtracting the importance scores of the 2011 assessment from those of 2016 for each domain.

Statistical analysis

Statistical analysis was performed using Stata software version 15.0 (Stata Corp, College Station, TX, USA). The QoL data (mean scores) of baseline and follow-up were compared using the t-test. The effect size of change score (difference between follow-up and baseline) for each domain was calculated using Cohen's D. Effect size was interpreted as small (>0.2), medium (>0.5) or large (>0.8) [20]. The mean differences of scores between baseline and follow-up in subgroups of the study was presented and compared using a linear regression analysis adjusting for the mean importance score at baseline for each domain. Considering difference score of importance between baseline and follow-up as outcome, linear regression analyses were performed adjusting for independent variables including importance score for each domain at baseline, gender, age group, educational level category, living arrangement, and morbidity category. Statistical significance was considered for a two-side test with $p<0.05$.

RESULTS

Characteristics of participants

Descriptive characteristics of the included participants are summarized in **Table 1**. The majority were female, aged between 68-72 years, with middle or high education and cohabiting. More than two thirds of them were diagnosed with no or one active disease or medical condition.

Scores of the importance of QoL domains

Mean scores of the importance of the seven domains of QoL at baseline and follow-up and mean of change (difference between baseline and follow-up) are summarized in **Table 2**. There was a decreasing

89 trend in the importance of all QoL domains but the "Material resources" domain. The effect size of change
90 score (difference between follow-up and baseline) for all domains was lower than 0.20.

91 *Ratings of the importance of QoL domains*

92 Ratings of the importance of the QoL domains at baseline and follow-up are summarized in
93 **supplementary Figure 2**. While "very high" was the most frequent rank for the "Health & mobility",
94 "Feeling of safety" and "Autonomy" domains at both assessments, "quite high" was the most frequent
95 rank for other domains at both baseline and follow-up.

96 *Change in the importance of QoL domains*

97 The proportions of change in the mean importance score of QoL domains between baseline and
98 follow-up are presented in **Figure 1** (Proportions of change per items were also provided in
99 **Supplementary Table 1)**. In all domains, the proportion of participants whose importance ratings
100 decreased was higher than that of increased ratings; this pattern was particularly obvious in the "Health
101 & mobility" domain.

102 *Determinants of change in the importance of QoL domains*

103 Mean and standard deviation of difference between importance mean scores of baseline and follow-up
104 per domain according to the participants' characteristics in 2011 are presented in **Table 3** (bivariate
105 analysis); according to adjusted p-values for importance score in baseline, age group was associated with
106 change in importance given to "Health & mobility" (P<0.001), "Feeling of safety" (P=0.004) and "Social &
107 cultural life" (P=0.035) domains; education level was associated with change in "Health & mobility"
108 (P<0.001), "Feeling of safety" (P=0.007), "Autonomy" (P<0.001), "Close entourage" (P=0.045) and "Social
109 & cultural life" (P=0.005) domains. Living arrangement was associated with change in "Close entourage"

(P<0.001) and morbidity was associated with “Health & mobility” (P<0.001) and “Social & cultural life” (P=0.001) domains. Gender had no significant effect on the evolution of importance given to any domain.

Determinants of change in the importance of the QoL domains are presented in **Table 4** (multivariable analysis). A decreasing importance with time was recorded for the higher age category in “Health & mobility”(P=0.002) and “Feeling of safety” (P=0.007) ~~and “Autonomy”~~ domains, and lower education levels were associated with decreasing importance given to all but the “Esteem & recognition” and “Material resources” domains. Likewise, living alone at baseline was related to decreasing importance of the “Close entourage” (P<0.001) domain and a higher level of morbidity was associated with declining importance in the “Health & mobility” (P=0.001) and “Social & cultural life” (P=0.004) domains.

DISCUSSION

This population-based study provides the first evidence on the change in importance of QoL domains among non-institutionalized older people over time as well as detailed information on the main determinants of these changes in the importance of each domain.

Importance of QoL domains at two time points and their changes

Although all QoL domains, at both time points, were found to be “quite high” to “very important”, the proportion of the older population attributing a “very high” importance slightly decreased in all domains between baseline and follow-up assessments. The decrease in the importance of all domains, in general, and of the “Health & mobility” domain, in particular, can also be interpreted by the model of selective optimization with compensation, proposed by Paul Baltes and Margret Baltes [21]. This model conceptualizes aging as a process of continuous selection in the investment of motivational and cognitive resources, under conditions of an age-related decline in the ratio between developmental gains and losses and of decreasing reserve capacity [22]. However, this model should be tested using data on such losses. In sum, changes in the importance of QoL domains might be explained by the model of selective

optimization with compensation and the extent of change can be related to the nature and vulnerability of domains by aging, i.e. older people gave less importance to those QoL domains that have deteriorated. Also, at individual level, such a decrease, from the highest extreme on first assessment could be partly due to the so-called phenomenon of the regression to the mean by which, when observing repeated measurements in the same subject, relatively high (or relatively low) observations are likely to be followed by less extreme ones, nearer the subject's true mean [23]. This phenomenon may particularly affect the "Health & mobility" domain, which had the highest importance at baseline and also the highest difference (decrease) between both assessments.

An important contribution of this study is to highlight that the overall slight decrease at population level in the importance score of the QoL domains may not reflect the extent of individual specific changes. In all domains, the proportion of change was substantial, with similar proportions in the direction of change within each domain. This suggests a very dynamic ranking that a global measure of change at the population level will not bring out.

Determinants of change in the importance of QoL domains

Positive associations between living alone and decreased importance of "Close entourage" domain, between low education and decreased importance of most of the domains, as well as between a higher level of morbidity and decreased importance of "Social & cultural life" domain can be due to the higher vulnerability of people living alone, low educated and with higher number of morbidities. Regarding age group, those in higher age were more likely to decrease the importance of "Health & mobility" and "Feeling of safety" domains. This finding is consistent with a cross sectional study assessing the importance of different aspects of QoL to older adults across diverse cultures which showed a decrease in the importance of QoL aspects by age, a downward trend reflected in the means of all the cultures studied [24]. The importance of the domain of health and mobility was also reported to be negatively

associated with age in a study using the same questionnaire in different study populations [18]. Gender was not associated with change in the importance of any QoL domain. However, significant gender differences in importance of most of the 38 studied QoL facets to older adults in 22 countries were noted in a cross sectional international investigation [25]; and certain items of QoL were also perceived more important to women than men among Norwegian Older Adults [4]. It seems that gender is associated with the importance of QoL domains cross-sectionally but not with changes observed longitudinally. In sum, education and to a less extent, age, living arrangement and morbidity, may have an impact on the evolution, inducing particularly a decrease in the importance given to specific QoL domains; characteristics indicating vulnerability were associated with a decrease in the importance of specific QoL domains. In general, it seems that poorer individual sociodemographic and health conditions tended to more decrease the importance of specific QoL domains.

Strengths and limitations

This study attempted to contribute to a deeper understanding of the diversity and variability of the importance of QoL domains over time in the aging process. Its main strength included a longitudinal design that allowed us to assess the change in the importance of QoL domains over five years in a population-based sample. While the change in importance of the domains or reprioritization has been taken into account in health related QoL research as a source of response shift, to our knowledge there is no study assessing change in importance of broadly defined QoL domains.

A limitation of this study is the relatively short time frame (5 years) that limited the ability to observe major shift; yet, significant changes were observed; further analysis with a longer follow-up would be interesting to perform to further understand the dynamic evolution of the ranking in domains of importance in QoL.

Conclusion

There are slight changes in the importance of the seven domains of QoL at population level because individual reports of increased and decreased importance balance practically. Decreases in the importance of QoL domains occurred more frequently in vulnerable sociodemographic and health profiles. Professionals and policy makers designing interventions to add quality to extended years of life for older people should likely consider the decrease of perceived importance of QoL domains among older, especially most vulnerable, people over time.

Compliance with Ethical Standards

Funding: This work was supported by a prize awarded by the Leenaards Foundation. The Lc65+ study has been supported by University of Lausanne Hospital Centre; University of Lausanne Department of Ambulatory Care and Community Medicine; Canton de Vaud Department of Public Health; City of Lausanne; Loterie Romande [research grant 2006-2008]; Lausanne University Faculty of Biology and Medicine [multidisciplinary research grant 2006]; Swiss National Foundation for Scientific Research [grant 3247B0-120795/1]; and Fondation Médecine Sociale et Préventive, Lausanne. The sponsors had no role in the design, execution, analysis and interpretation of data, or writing of the study.

Conflict of interest: The authors have no conflict of interest to declare.

Ethical approval: All procedures were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The protocol of the study was approved by the Ethics Committee of the Faculty of Biology and Medicine of the University of Lausanne (Protocol No. 19/04).

Informed consent: Informed consent was obtained from all individual participants in Lc65+.

Confidentiality: The data were collected and coded before being handled for analysis and the investigators were blinded to the identities of the participants.

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TABLES

Table 1: Baseline (2011) characteristics of included participants (n=1947 participants)

	Number (%)
Gender	
Men	741 (38.1)
Women	1206 (61.9)
Age (years)	
68-72	1076 (55.3)
73-77	871 (44.7)
Education*	
High	792 (40.7)
Middle	776 (39.9)
Low	376 (19.4)
Living arrangement	
Not alone	1161 (59.9)
Alone	778 (40.1)
Morbidity	
0 active medical condition	660 (34.0)
1	667 (34.4)
2 or more	612 (31.6)

Table 2: Scores of the importance of QoL domains at baseline (2011) and 5-year follow-up (2016)

Domains	Baseline (2011)	Follow-up (2016)	P-value*	Mean ± SD of change (difference between follow-up and baseline)	Effect size**
Health & mobility	84.8 ± 16.8	81.8 ± 18.4	<0.001	-3.28 ± 17.8	0.17
Feeling of safety	80.7 ± 17.3	79.9 ± 17.4	0.031	-0.92 ± 18.4	0.05
Autonomy	80.2 ± 15.3	78.8 ± 16.6	<0.001	-1.31 ± 15.8	0.09
Close entourage	73.0 ± 18.7	71.3 ± 18.9	<0.001	-1.76 ± 17.0	0.09
Esteem & recognition	69.6 ± 19.4	68.9 ± 19.8	0.061	-0.90 ± 20.5	0.04
Material resources	69.5 ± 15.0	69.8 ± 15.5	0.555	0.22 ± 16.4	0.00
Social & cultural life	58.3 ± 20.4	57.3 ± 20.8	0.003	-1.23 ± 17.1	0.05

Results are expressed as mean ± standard deviation.

* Based on t-test

** Cohen's d effect size. Effect size is interpreted as small (>0.2), medium (>0.5) or large (>0.8).

Figure 1: Prevalence of change in the mean importance score of QoL domains between baseline (2011) and follow-up (2016)

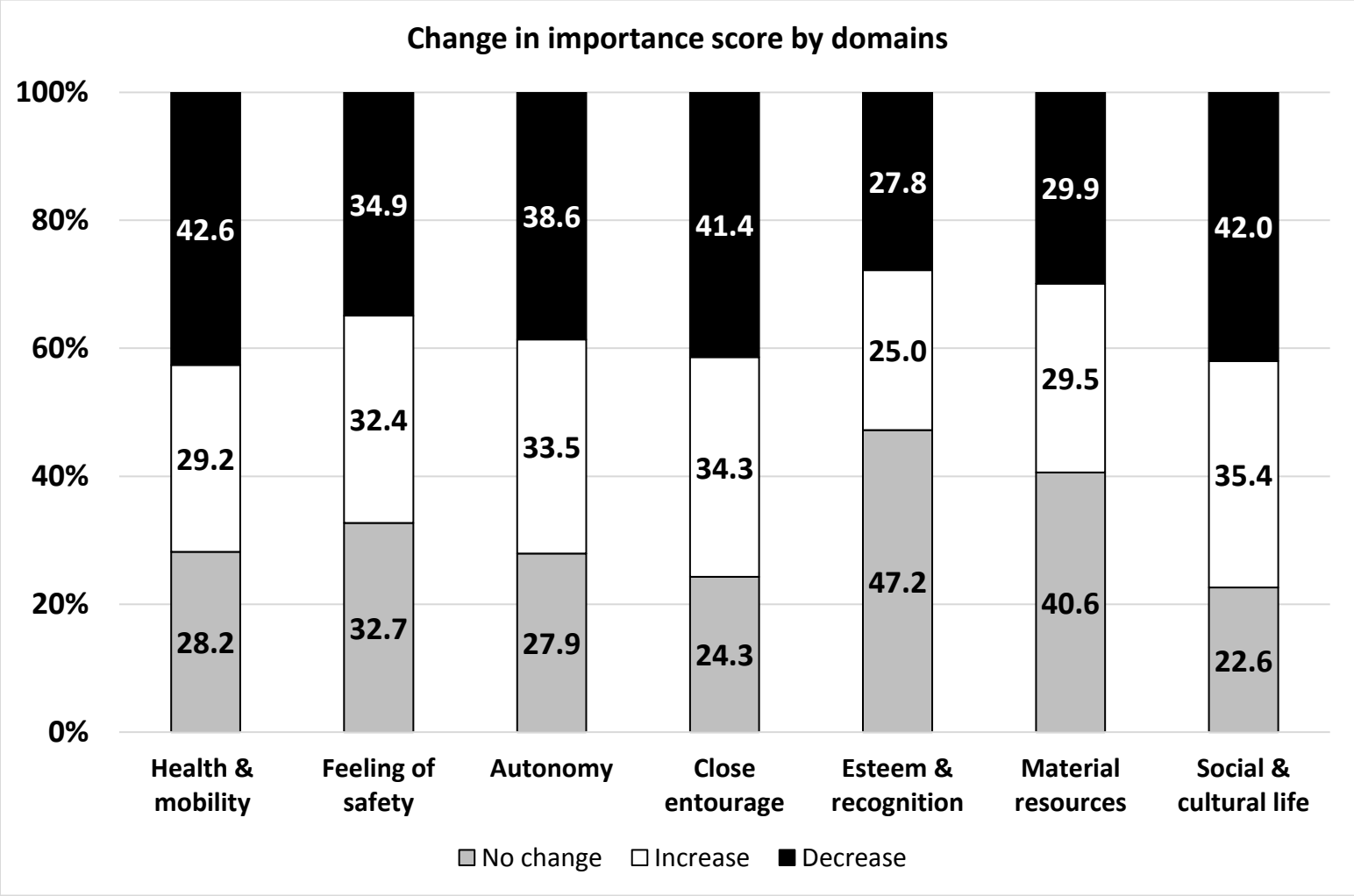


Table 3- Mean ± standard deviation of difference in importance mean scores between 2011 & 2016 per domain according to the participants' characteristics in 2011

	Health & mobility	Feeling of safety	Autonomy	Close entourage	Esteem & recognition	Material resources	Social & cultural life
Gender							
Men	-2.40 ± 18.3	-0.53 ± 17.9	-1.17 ± 15.5	-1.97 ± 16.7	-0.53 ± 20.3	0.23 ± 16.9	-1.07 ± 16.8
women	-3.84 ± 17.5	-1.18 ± 18.7	-1.40 ± 15.9	-1.61 ± 17.2	-1.13 ± 20.6	0.22 ± 16.0	-1.34 ± 17.3
Adjusted P-value*	0.203	0.296	0.202	0.912	0.100	0.943	0.142
Age at baseline							
68-72	-2.64 ± 17.6	-0.03 ± 18.3	-1.14 ± 15.2	-1.26 ± 16.5	-0.76 ± 20.2	0.52 ± 16.2	-0.64 ± 16.8
73-77	-4.11 ± 18.0	-2.07 ± 18.5	-1.53 ± 16.4	-2.42 ± 17.6	-1.08 ± 20.8	-0.15 ± 16.6	-2.02 ± 17.5
Adjusted P-value*	<0.001	0.004	0.109	0.088	0.179	0.319	0.035
Education							
High	-2.44 ± 16.5	-0.42 ± 17.8	-0.67 ± 14.7	-1.88 ± 16.5	-1.09 ± 20.7	-0.48 ± 14.9	-1.98 ± 15.9
Middle	-3.83 ± 18.0	-1.37 ± 18.5	-1.99 ± 16.1	-1.69 ± 16.3	-1.07 ± 19.8	0.22 ± 16.3	-0.87 ± 16.7
Low	-4.06 ± 20.2	-1.18 ± 19.4	-1.36 ± 17.1	-1.71 ± 19.6	-0.15 ± 21.6	1.87 ± 19.5	-0.48 ± 20.5
Adjusted P-value*	<0.001	0.007	<0.001	0.045	0.311	0.104	0.005
Living arrangement							
Not alone	-3.20 ± 17.5	-0.62 ± 18.4	-1.19 ± 15.5	-2.14 ± 15.6	-0.97 ± 19.9	0.26 ± 16.3	-1.18 ± 16.9
Alone	-3.36 ± 18.3	-1.42 ± 18.4	-1.53 ± 16.2	-1.09 ± 19.3	-0.82 ± 21.3	0.20 ± 16.4	-1.26 ± 17.4
Adjusted P-value*	0.970	0.585	0.339	<0.001	0.516	0.143	0.854
Morbidity							
0 active medical condition	-2.55 ± 17.3	0.32 ± 18.5	-0.99 ± 15.4	-2.14 ± 16.7	-1.34 ± 20.9	0.88 ± 16.3	-0.28 ± 16.3
1	-3.39 ± 17.2	-1.25 ± 17.6	-1.46 ± 15.9	-1.86 ± 17.0	-0.21 ± 20.5	-0.19 ± 16.4	-1.35 ± 17.5
2 or more	-3.93 ± 19.0	-1.90 ± 19.1	-1.54 ± 16.1	-1.28 ± 17.3	-1.09 ± 19.9	-0.03 ± 16.5	-2.27 ± 17.5
Adjusted P-value*	<0.001	0.149	0.080	0.649	0.347	0.127	0.001

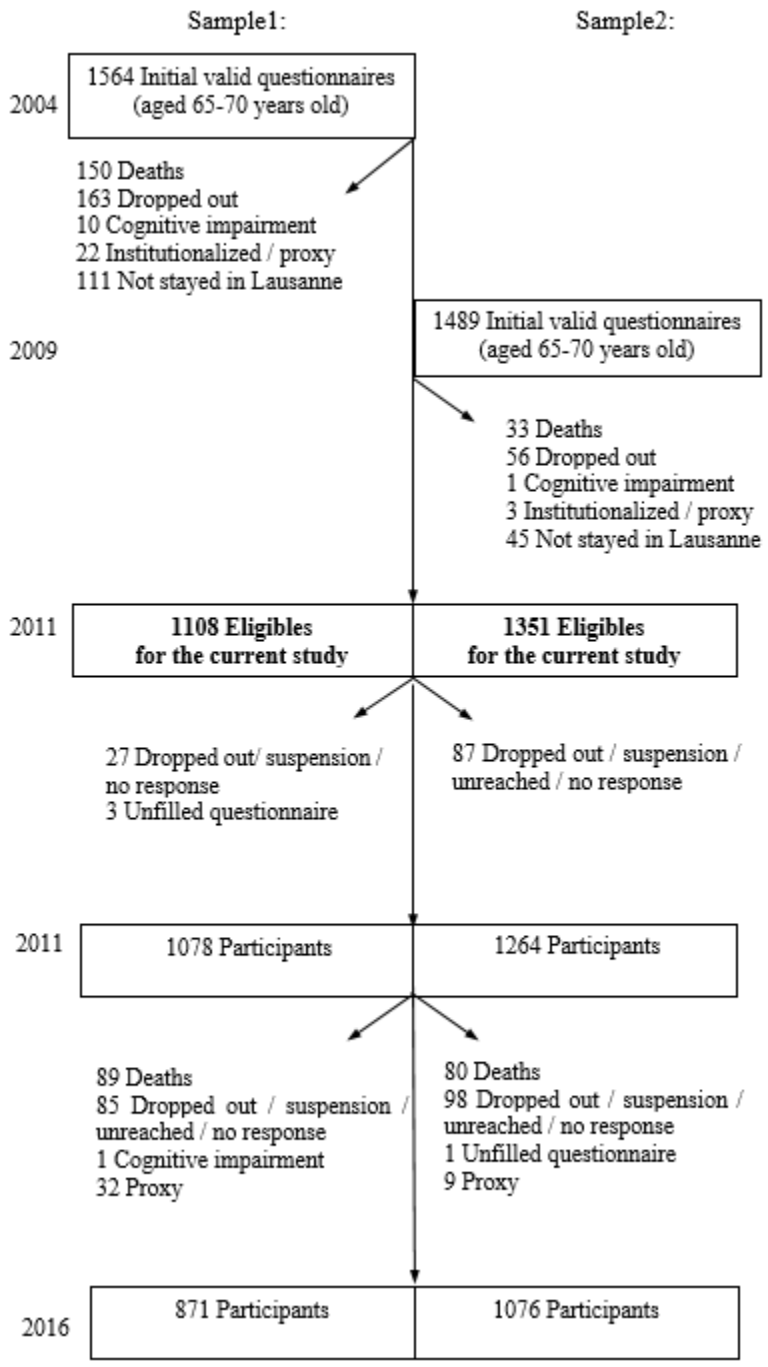
* using linear regression adjusting for importance score at baseline

Table 4- Determinants of change in the importance of the QoL domains, multivariable models

	Health & mobility	Feeling of safety	Autonomy	Close entourage	Esteem & recognition	Material resources	Social & cultural life
Baseline importance score	**-0.51 (-0.55; -0.46)**	**-0.57 (-0.6**1; **-0.52)**	**-0.47 (-0.5**2; **-0.43)**	**-0.44 (-0.48; -0.40)**	**-0.55 (-0.59; -0.51)**	**-0.58 (-0.63; -0.54)**	**-0.35 (-0.39; -0.32)**
Gender							
Man	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Woman	-0.55 (-2.15; 1.06)	1.33 (-0.25; 2.90)	1.13 (-0.30; 2.56)	1.29 (-0.29; 2.87)	1.34 (-0.43; 3.12)	0.51 (-0.89; 1.91)	1.56 (-0.05; 3.17)
Age at baseline							
68-72	ref.	ref.	ref.	ref.	ref.	ref.	ref.
73-77	**-2.42 (-3.92; -0.92)**	**-2.02 (-3.48; -0.56)**	-0.90 (-2.22; 0.42)	-1.19 (-2.69; 0.31)	-0.97 (-2.62; 0.68)	-0.48 (-1.78; 0.82)	-1.18 (-2.67; 0.32)
Education							
High	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Middle	**-3.27 (-4.90; -1.65)**	-0.94 (-2.52; 0.65)	**-2.51 (-3.94; -1.07)**	-0.88 (-2.50; 0.74)	-1.69 (-3.48; 0.10)	-1.05 (-2.47; 0.37)	**-2.15 (-3.80; -0.50)**
Low	**-5.55 (-7.69; -3.40)**	**-2.75 (-4.82; -0.69)**	**-3.48 (-5.36; -1.60)**	**-2.56 (-4.73; -0.40)**	-0.78 (-3.11; 1.55)	-1.34 (-3.18; 0.51)	**-3.07 (-5.26; -0.88)**
Living arrangement							
Not alone	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Alone	0.41 (-1.18; 1.99)	-0.71 (-2.27; 0.85)	0.42 (-0.99; 1.83)	**-3.96 (-5.66; -2.26)***	0.19 (-1.56; 1.94)	-1.12 (-2.50; 0.27)	-0.35 (-1.95; 1.24)
Morbidity							
0 active medical condition	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	-0.63 (-2.40; 1.13)	0.29 (-1.45; 2.02)	-0.52 (-2.08; 1.05)	0.15 (-1.61; 1.91)	0.94 (-1.01; 2.89)	-0.95 (-2.50; 0.59)	-1.46 (-3.23; 0.30)
2 or more	**-2.99 (-4.83; -1.15)**	-0.80 (-2.59; 1.00)	-1.06 (-2.68; 0.57)	-0.28 (-2.14; 1.58)	-0.73 (-2.75; 1.30)	-0.96 (-2.56; 0.64)	**-2.68 (-4.52; -0.85)**

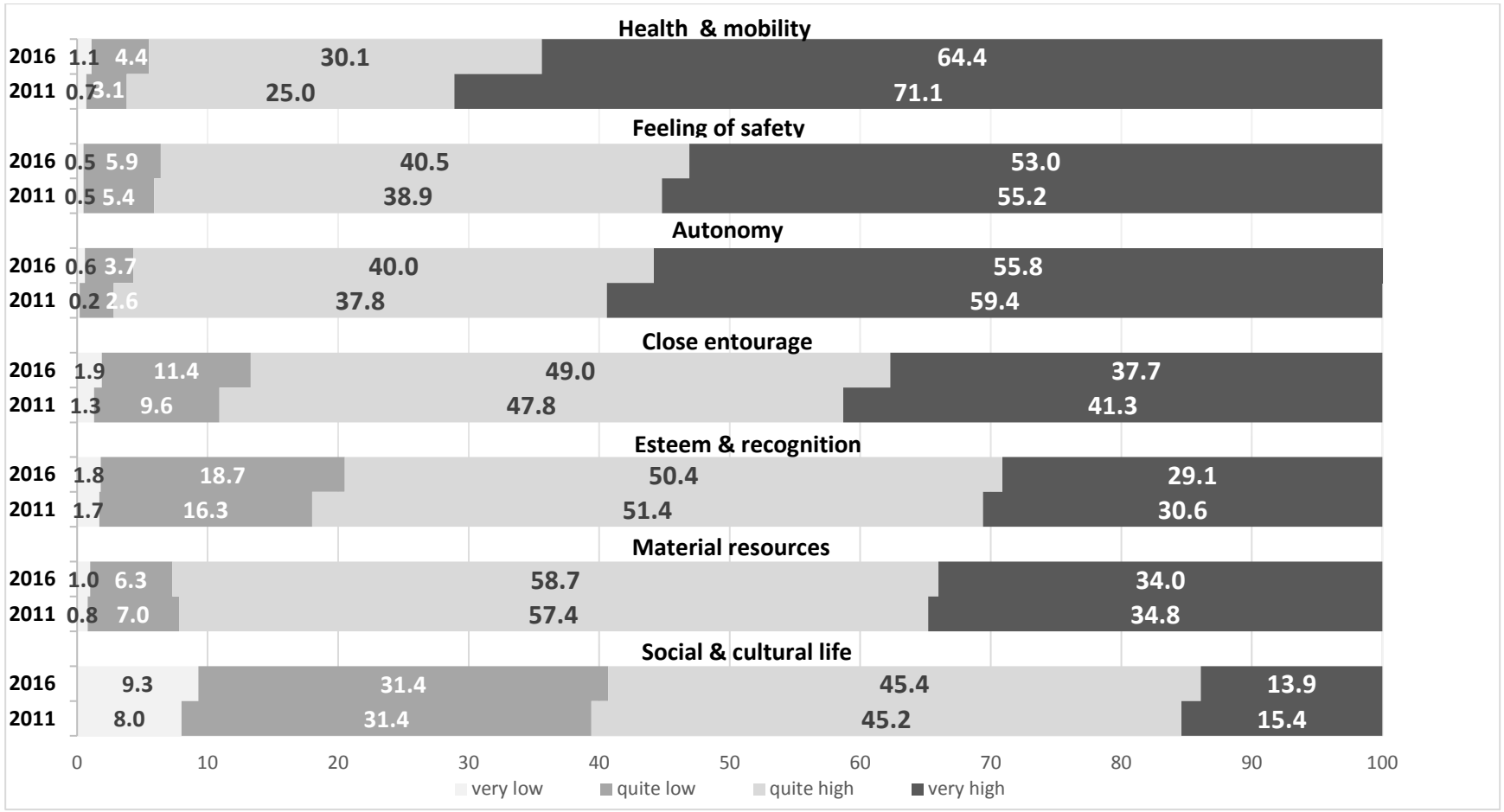
Results are expressed as regression coefficients Beta and 95% confidence interval.
Significant coefficients are in bold.

SUPPLEMENTARY FIGURE 1: Selection procedure of participants from Lc65+ study



Total participations of the current study= 871 + 1076 =1947
(N=1947)

Supplementary figure 2: Ratings (very low to very high important) of the importance of the domains of QoL at baseline (2011) and follow-up (2016) (percentage)



At baseline and follow up, the importance score of each domain was categorized into four ratings: very low: 0-25, quite low: 26-50, quite high: 51-75, and very high: 76-100.

Supplementary table 1. List of 28 quality of life items and frequencies (%) of change (2011-2016) per items

QoL domains	Items	No change (%)	Increase (%)	Decrease (%)
Health & mobility	Mobility, being able to move alone	1259 (68.4)	218 (11.8)	365 (19.8)
	Being able to use public transport alone	1207 (65.4)	275 (14.9)	363 (19.7)
	Being able to travel	1030 (57.1)	309 (17.1)	466 (25.8)
	Not being dependent on help in daily life	1064 (59.1)	297 (16.5)	440 (24.4)
	Physical and mental health	1217 (66.1)	218 (11.8)	406 (22.1)
Feeling of safety	Safety at home	1183 (63.6)	326 (17.5)	352 (18.9)
	Safety in the street	1051 (57.8)	362 (19.9)	406 (22.3)
	Adequate health insurance coverage	1183 (63.9)	309 (16.7)	360 (19.4)
	Access to health care and prevention	1063 (60.0)	346 (19.5)	363 (20.5)
Autonomy	Being able to express opinion, to vote, etc.	1124 (61.1)	348 (18.9)	367 (20.0)
	Being well informed to meet needs and decide	1151 (62.4)	317 (17.2)	376 (20.4)
	Being useful to others	1110 (60.7)	301 (16.5)	416 (22.8)
	Being able to manage money matters alone	1264 (68.5)	267 (14.5)	315 (17.0)
	Being able to decide on issues of daily life	1201 (65.2)	289 (15.7)	352 (19.1)
Close entourage	Family relationships	1072 (59.9)	332 (18.6)	384 (21.5)
	Couples' relationships	824 (65.0)	185 (14.6)	258 (20.4)
	Friendly atmosphere meals	1011 (59.2)	296 (17.4)	400 (23.4)
	Intergenerational relationships	1004 (57.4)	341 (19.5)	404 (23.1)
	Friendship relationships	1134 (62.4)	319 (17.6)	364 (20.0)
Esteem & recognition	Self-esteem	1118 (63.2)	300 (16.9)	352 (19.9)
	Being heard and respected	1098 (61.4)	329 (18.4)	362 (20.2)
Material resources	Housing comfort	1252 (68.0)	312 (16.9)	277 (15.1)
	Financial resources	1155 (63.7)	346 (19.1)	312 (17.2)
	Sufficient, good quality food	1219 (66.2)	295 (16.0)	327 (17.8)
Social & cultural life	Integration into a group, association or society	884 (53.2)	385 (23.2)	391 (23.6)
	Cultural and leisure activities	979 (56.0)	340 (19.5)	429 (24.5)
	Religion, philosophy or spiritual life	1076 (60.4)	320 (18.0)	384 (21.6)
	Being able to exercise one's creativity, share ideas	1048 (58.7)	324 (18.1)	415 (23.2)