

Chapter 2

QUALITY OF LIFE IN MEXICO AND IN SPAIN

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ABSTRACT

The term Quality of Life (QoL) is a new scientific concept broadly-used in the field of public policy; therefore, it has become a key goal in social welfare for the elderly at Local, National, Regional, and International levels. In the field of social and health services, an elder's QoL is considered as an outcome of projects, programs, or policies, and it is also used for describing contexts, places and individuals. With the purpose of describing people living in Mexico (Colima State), older than 60, in comparison to those living abroad, in Spain (Alicante Province), and, in order to make recommendations for enlarging and increasing the number of well-being among this population target in Colima, a cross-cultural study of QoL was performed. With this objective, the CUBRECAVI (*Brief Questionnaire of Quality of Life for the Elderly*, Fernández-Ballesteros and Zamarrón, 1996, 2007) --a multidimensional instrument widely used across Latin American countries and in Spain-- was administered to two representative samples of individuals older than 60 in Mexico and in Spain. Also, in order to take into consideration the contextual (macro) level, QoL population indicators from Mexico and from Spain were examined. The results are presented and discussed taking into consideration both subjective and objective measures, as well as contextual and personal factors.

In conclusion, although both objective (population/contextual) macro and micro (personal) level factors and indicators of QoL are higher in Spain than in Mexico, subjective appraisal of the quality of life and life satisfaction are higher in Mexico than in Spain. Since, this research project might serves as a support for several political recommendations for improving life conditions among the elderly in Colima (Mexico), its results also underline the importance of taking into consideration a multidimensional concept of QoL including objective and subjective personal and contextual measures and indicators.

* This chapter has been written under the auspices of the FONCICYT (European Union and Mexican States), CASOENAC-094670 Research Project. All correspondence can be sent to Prof. Dr. R. Fernández-Ballesteros.- Dept. of Biopsychology and Health. Autonomous University of Madrid. Campus Cantoblanco. 28049-Madrid (Spain) (r.fallesteros@uam.es)

INTRODUCTION

Quality of Life (QoL) is a relatively new concept which emerged as a scientific label at the end of the sixties and its traces can be found throughout several scientific data bases. The importance, multicontextuality, and growth of QoL literature was assessed by looking at the number of citations in several scientific data bases (Urban, Biosis, Medline PsycLit and Sociofile; see Fernández-Ballesteros 1998, 2010). From these studies, it can be concluded that at the beginning of the seventies, there were no more than one hundred references to QoL, but forty years later, Sociofile (sociological scientific literature data base) had increased the citations in this field from 11 to almost 300; PsycInfo (the well known source of psychological publications) runs from 8 to close to 600, and finally, publication sources in the field of medicine and health such as Pubmed, increased citations of QoL and aging from 100 to more than 5000 (Fernández-Ballesteros, 1998, 2011a.). It can be concluded that, in the field of aging, QoL is a keyword used as a scientific concept and which spreads out in bio-medical and health, socio-political and psychosocial disciplines.

As pointed out elsewhere (Fernández-Ballesteros, 2011a), from a semantic point of view, “quality” corresponds to “fineness or grade of excellence,” as specified in the entry in Webster’s (Webster’s Dictionary, 1986); “life” is a broad category that includes all living beings (as distinct from inorganic objects), but more specifically, QoL refers to *human life*. Therefore, briefly, QoL is concerned with the positive characteristics of human life.

After reviewing a variety of models of QoL, Brown, Bowling and Flynn (2004) distinguished several types of *QoL components*: objective social indicators (e.g.: income, living conditions, etc.); subjective measures (e.g. satisfaction, happiness, etc.); social indexes (e.g.: crime rates, living conditions, etc.); satisfaction of human need measures (e.g.: self-esteem, self-actualization, etc.); psychological and personality characteristics (subjective well-being, life satisfaction, happiness, self-of coherence); health and functioning (e.g.: generic health measures, specific health problems); social health, social networks and support (e.g.: social interaction frequency, social satisfaction); social cohesion and social capital (e.g.: access to leisure, sports facilities, etc.), and environmental contexts ecologically (e.g.: physical and/or neighbourhood resources, etc.).

Although this heterogeneous set of factors are expressing a multidimensional conceptualization of a diverse nature (objective and subjective), and present at different levels (contextual vs. individual), other authors have defined QoL equivalent to *well-being* (Campbell, 1981), or to *happiness* (Veenhoven, 1999) in the social domain, to *health status* in the bio-medical field (which uses the *Health-related QoL* concept – for example, Naughton and Wiklund, 1993), and to *life satisfaction* in the psychology domain (Palys and Little, 1983). Even, there are authors, such as WHO (1993, 1995), which had previously considered QoL as a multidimensional construct (with a diversity of components such as health, social relationships, environment, finances), reduced its measure to the subjective appraisal of those different components, therefore, transforming QoL into a subjective concept.

Many authors agree that QoL is in a pre-scientific state, considering it as an “abstract”, “soft”, “amorphous” concept (Birren and Dieckmann, 1991 pp. 344-345), as one that “has no fixed boundaries” (Hughes, 1990, p 47), that “has been exceedingly difficult to define (it) precisely” (Andersen, Davidson and Ganz, 1994, p.367) or that is “difficult to operationalize” (Lawton, 1991), and even as one whose “meaning is dependent of the user of the term”

(Fowlie and Berkeley, 1987; p.226), or it is “in the eye of the beholder” (Ziller, 1974). Walker (2005) summarizes these opinions stating that “QoL is a rather amorphous, multilayered and complex concept with a range of components –objective, subjective, macrosocietal, micro-individual, positive and negative– which interact together” (p. 3).

In fact, as Fernandez-Ballesteros (2011a) emphasized, there is much more consensus in what QoL is *not* as Birren and Dieckmann (1991) stated: QoL is not equivalent to quality of the environment, to quantity of material goods, to physical health status or to quality of health care, just as it is distinct from subjective constructs such as life satisfaction, morale or happiness (Campbell, 1981; Georg and Bearon, 1980; Naughton and Wiklund, 1993). As also Browne, et al. (1994) pointed out: “Quality of Life (QoL) is (the product) of the dynamic interaction between external conditions of an individual’s life and the internal perceptions of those conditions” (p.235). Thus, the concept cannot be reduced to life’s external conditions or to personal or individual characteristics, or even to one’s perception of external conditions; nor, indeed, to any objective or subjective component of external or personal conditions. We totally agree with by Diener and Suh (1997) who emphasized that “...quality of life is a complex, multifaceted construct that requires multiple approaches from different theoretical angles. We encourage scientists from the various disciplines of social science to exploit the strengths of other’s contributions in a collaborative effort. Instead of turf battles over who has the best indicator, each discipline needs to borrow insights about quality of life from the other fields” (p. 214).

In sum, taking an integrative approach, taking into consideration the diversity of factors involved in human life, we agree that QoL is a *multidimensional* concept integrating both *objective* and *subjective* conditions and which can be considered at different *multilevels*, from populations to individuals.

On the basis of several theoretical and empirical works, Fernández-Ballesteros and her associates (1993, 1996, 1998, for a review see Fernández-Ballesteros, 2011a) arrived at a simple and parsimonious classification system of the most general (commonly accepted), multidimensional components of QoL in old age, classifying them into two broad multi-level multi-dimension axes: population (or contextual) versus individual (or personal) units of analysis, and objective versus subjective nature of those multi-dimensional components analyzed (see Fernández-Ballesteros, 1993, 2011a, b).

Figure 1 shows some examples of the commonest multidimensional ingredients of QoL in old age, indicating the unit level, that is, whether they refer to population/contextual (aggregate indicators) or to the individuals, and whether the conditions examined are objective or subjective in its nature (see: Fernández-Ballesteros, 2011).

Box 1 includes all population/contextual and objective aspects of the quality of life, such as environmental and physical factors (latitude, climate, residential facilities, etc.), economic factors (rent per capita, pension systems, micro-credit facilities, etc.), social factors (adult education, social networks, social services availability, etc.) and health factors (life expectancy, disability free life expectancy, health services, etc.).

Box 2 lists conditions attributed to a given society as reported perceptions of a group of individuals, social stereotypes about ageing or collective self-efficacy, aggregate well-being or subjective health which could be considered as QoL-related conditions.

Box 3 contains all personal or individual conditions cited by experts as ingredients of QoL that can be considered objective, such as demographic factors (age, gender, marital status), economic factors (income, economic resources), social factors (family or social

support), functional abilities (Activities of Daily Living, ADL, or Instrumental Activities of Daily Living, IADL), health conditions (medical records, prescriptions, days in hospital, etc.) or physical fitness (balance, strength, BMI, etc.).

Unit Nature	POPULATION/ CONTEXTUAL	INDIVIDUAL
Objective	<ul style="list-style-type: none"> -Demographics (aging rates, density...) -Physical factors (latitude, residential facilities, protective assistance...) -Economic factors (IPC, pension system...) -Social factors (social networks, social services availability...). -Equality legislation. -Health factors (life expectancy, disability free life expectancy, health security system...). -Disability/ability prevalence in old age. 	<ul style="list-style-type: none"> -Demographic characteristics (age, sex, education, SES...) -Physical conditions (home, residence, neighbourhood...) -Economic factors (income...) -Social factors (family support, social network...) -Functional abilities and activity (ADL...) -Health conditions (medical records, prescriptions, days spent in hospital...) -Physical fitness (balance, strength, BMI)
Subjective	<ul style="list-style-type: none"> - Any collective social perception such as stereotypes about aging, social values (individualism versus collectivism) 	<ul style="list-style-type: none"> -Subjective conditions such as well-being, life-satisfaction, control perception, etc. -Any personal appraisal about his/her conditions in box 2. or about external conditions in box 1

Figure 1. Classification system for most common factors of QoL in old age. (from Fernandez-Ballesteros, 1993).

Finally, Box 4 deals with subjective conditions cited as QoL factors, such as life satisfaction, well-being or perception of control, together with any other subjective appraisal of external or personal factors, such as how the individual perceives both contextual and individual aspects of the quality of life (e.g., satisfaction with health services or satisfaction with personal health conditions).

Let us give some examples of measures of QoL. Following our argument, from the population perspective, QoL would refer globally to a given *universe*, covering a territory and/or society or a given context. A good example of multidimensional population measurement is *The Economist QoL Index*. This index was developed in an effort to remedy the shortcomings of Life Satisfaction Survey measures, which, it was argued, reduced QoL to happiness, life satisfaction or other subjective conditions (that is, a portion of subjective life). A set of QoL multidimensional domains and indicators were selected: material well-being (GDP per capita); health (Life Expectancy at birth), political stability and security (The Economist measure), family life (divorce rates), community life (church or union participation) climate and geography (latitude), job security (unemployment rate), political freedom (average index of civil and political liberties), and gender equality (average ratio of men/women salaries). All these domains and indicators can be placed in Box 1 and 2.

From an individual perspective, many instruments have been developed (for a review see Fernández-Ballesteros, Maciá and Zamarrón 1996, 2007). Among them all, the WHOQOL (1993, 1995) has been the one with the most extended use in Latin America. Although it has

six multidimensional domains (physical health, psychological, independence, social relationships, environment and spirituality) all those domains are assessed through the person's appraisal; therefore it is measuring the subjective appraisal covering only subjective aspects of QoL (that is reducing QoL to components in Box 4).

The CUBRECAVI ("Short Quality of Life Questionnaire," Fernández-Ballesteros and Zamarrón, 1996, 2007), which is also widely used in several Latin American countries is based on a multidimensional concept of QoL containing both subjective and objective components. It includes nine domains assessed through objective and subjective questions: Physical and mental health (objective and subjective health); Social integration (social network size and social satisfaction); Functional abilities; Activity and leisure; Life satisfaction; Social and health services (availability and satisfaction); Environmental quality (subjective appraisal of physical characteristics); Education; and Income.

The CUBRECAVI shows a high internal consistency and an internal validity of its domains, and a high sensitivity to intervention. Furthermore, its raw scores can be converted into norms (available by age group and by living conditions).

Finally, the CUBRECAVI allows the weighing of individual preferences and also asks about the individual's overall appraisal of his/her quality of life. In sum, all domains can be placed in Boxes 3 and 4.

Summarizing, there is a consensus that QoL in old age can refer to different "units" (from contexts or populations to individuals) and embracing health, functional status and activity levels, social, economic, and environmental components assessed, most of them, objectively and subjectively, as well as subjective conditions such as perceptions, evaluations, and satisfaction of population, context and individual levels which can be classified into the 4 different quadrants on the proposed classification system in order to assess the Quality of Life in Mexico and Spain within the CASOENAC Project complementing the CUBRECAVI, as an individual set of measures, with other indicators of QoL of both contexts.

CASOENAC PROJECT

CASOENAC (Socio-demographic Change and Active Aging: Scientific Contribution to Public Policies) emerged as a European Union-Mexican States Agreement of collaboration under a Consortium of the Health Department of the State of Colima, the University of Colima, and the University of Guadalajara (Mexico), the Autonomous University of Madrid and the Academia de Yuste (Spain), and the University of Heidelberg (Germany).

The *general objective* of this Project has been: "to develop gerontological knowledge in order to provide high quality bio-psycho-social services to the Colima State elderly people". The Subproject on Quality of Life was developed by the University of Guadalajara and the Autonomous University of Madrid under the following *specific objective*: "to assess the Quality of Life of the elderly making Regional and European comparisons". This article reports the results obtained trying to measure population and individual QoL.

METHOD

The Context

In order to compare people from two different countries, before examining the individual's QoL, it is important first to examine indicators at population levels. Geographically, the two contexts (region and province respectively) assessed in this study are shown in Figure 2. The main target population in this study was Colima State, therefore, the Spanish sample was selected in Alicante, a province with some similarities to Colima, taking into account some geographical characteristics of both territories: both are located under the ocean, they have broad touristic resources, they have comparable comparisons with their respective countries.

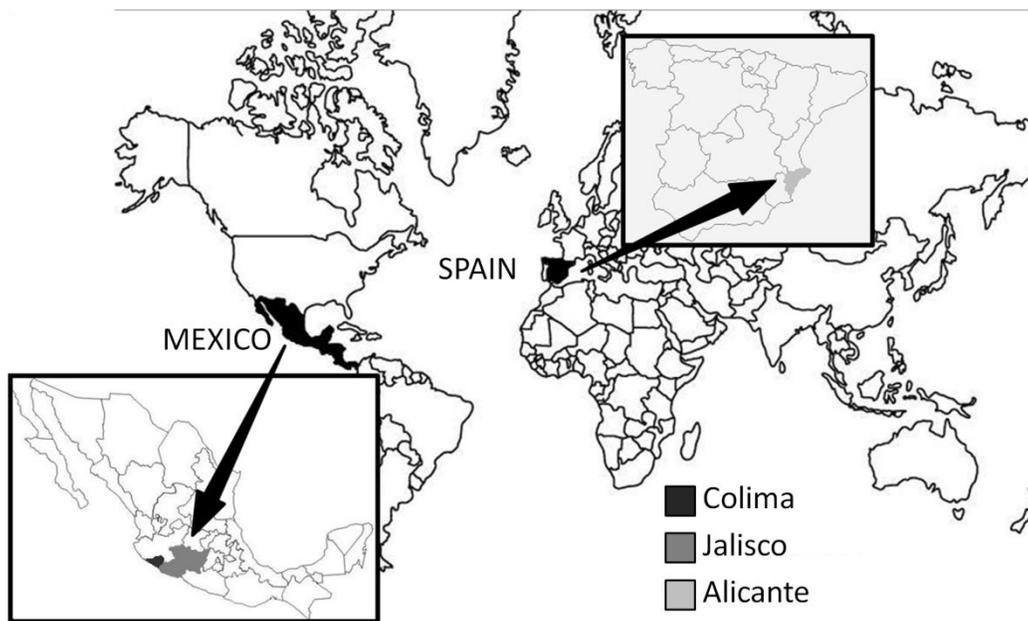


Figure 2. Geographical location from where the sample has been collected.

Since it is highly difficult to have disaggregated data for Colima and Alicante, we are going to examine the Mexico and Spain population QoL indicators through several sources of data. First of all, taking the Economist QoL Index data for 100 Countries around the world, using a 10 point Scale, Mexico scored 6.766 being in the 32nd place, and Spain scored 7.727 being in the 10th position. Secondly, we have also collected some population statistics from three different data bases: The World Health Report (WHO, 2000), United Nations Development Programme (2000), Word Values Survey (2005, 2007).

In table 1, not only objective aspects are shown (i.e. GDP, Life expectancy, Adult literacy rates) but also subjective ones (i.e. Life satisfaction, subjective health, happiness).

Table 1 shows that even though all objective measures are better in Spain than in México (i.e. the Disability Free Life Expectancy is longer in Spain than in Mexico), Mexican people report better scores in the subjective appraisal of QoL (i.e. Mexicans report more happiness than Spanish people).

Table 1. Population data of subjective and objective factors of QoL

Variable/Country	MÉXICO	ESPAÑA
OBJETIVE FACTORS of QoL		
GPD per capita	7.704	16.212
Life expectancy at birth	72,3	78,1
Males, Life expectancy at birth	71,0	75,3
Females, Life expectancy at birth	77,1	82,1
DFLE Total at birth	65,0	72,8
Males, DFLE at birth	64,4	69,8
Males , DFLE at 60	14,7	16,8
Females, DFLE at birth	67,6	75,7
Females, DFLE at 60	16,8	20,1
Males, Expectation of disability at birth (years)	8,6	5,5
Females, Expectation of disability at birth (years)	9,6	6,4
Males, % years with disability	12,2	7,3
Females,% years with disability	12,4	7,7
Adults literacy rate	90,8	97,4
SUBJETIVE FACTORS of QoL		
Life Satisfaction	7,41	7,13
Positive affect	2,68	1,59
Negative affect	1,30	0,89
Affect balance (Positive-Negative)	1,38	0,70
Subjective health	2,36	2,35
Happiness	3,49	3,05
Disability Free Life Expectancy (DFLE)		

* The World Health Report (WHO, 2000), United Nations Development Programme (2000) and Word Values Survey (2005, 2007).

Finally, it would be important to deduce whether age is influencing those subjective aspects of QoL in each country. So, data collected from the Word Values Survey show to what extent as age increases, “happiness” and “subjective health” decrease, but this happens significantly in both Mexico and Spain (Table 2).

According to the data collected from this study (Word Values Survey, 2005, 2007) and taking into account only people who were over 65, we found that although differences between Spain and Mexico in “subjective health” were not significant, the Mexicans reported significantly better “Happiness” than Spaniards (Table 3), as we have pointed out before taking into consideration the general population.

The data reported illustrates once again the importance of considering objective aspects of QoL and not only subjective conditions. In this Project, if we had considered only subjective characteristics we would not have developed any proposal to improve QoL of older Mexican’s from Colima.

Table 2. ANOVA to gauge the differences between age groups in two variables: “Subjective health” and “Happiness”

COUNTRY			M	SD	F	Sig. (2-tailed)
MEXICO	Subjective health*	15-24	3,08	,696	23,516	,000
		25-34	2,96	,748		
		35-44	2,81	,790		
		45-54	2,81	,808		
		55-64	2,51	,845		
		65+	2,36	,855		
	Happiness*	15-24	3,54	,625	7,937	,000
		25-34	3,59	,595		
		35-44	3,51	,644		
		45-54	3,49	,694		
		55-64	3,30	,799		
		65+	3,29	,731		
SPAIN	Subjective health*	15-24	3,39	,571	77,647	,000
		25-34	3,25	,604		
		35-44	3,14	,559		
		45-54	2,98	,567		
		55-64	2,81	,607		
		65+	2,35	,736		
	Happiness*	15-24	3,18	,547	10,141	,000
		25-34	3,16	,493		
		35-44	3,08	,380		
		45-54	3,04	,426		
		55-64	2,99	,526		
		65+	2,90	,510		

Table 3. Independent-sample T to gauge the differences between Mexico and Spain in two variables: “Subjective health” and “Happiness”

People 65+	PAIS	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Subjective health	Mexico	129	2,36	,855	,133	,894
	Spain	249	2,35	,736		
Happiness	Mexico	131	3,25	,778	4,761	,000*
	Spain	250	2,89	,523		

The Participants

The sample was recruited from people aged over 60 who live in the Alicante region (Spain), Jalisco¹ and Colima States (Mexico). The sample has been collected by the random routes sampling method.

The total sample consisted of 1817 participants 60 years of age and older (n = 1199 Mexico, Spain n = 618). The mean age is 70.19 years (SD 7.97) in Mexico and is 71.81 years (SD 9.97) in Spain (p <.001). In both countries, the proportion of women was higher than men (54.6% and 53.1%). Regarding marital status, in Mexico there were 49.2% married and 34.4% widowed, while in Spain most of the participants were married 65.5% and 27.8% were widowed (Table 4).

Table 4. Socio-demographic data of the participants

Variable	Mexico (n= 1199)	Spain (n= 618)	p-value
Age, years (Mean \pm SD)	70.19 \pm 7.90	71.81 \pm 7.97	.000 ^a
60 – 64	29.4 (352)	22.3 (138)	.016 ^b
65 – 69	22.4 (269)	22.8 (141)	
70 – 74	21.0 (252)	22.0 (136)	
75 – 79	11.8 (142)	13.9 (86)	
80 +	15.3 (184)	18.9 (117)	
Gender, % (n)			
Women	54.6 (655)	53.2 (329)	.572 ^b
Men	45.4 (544)	46.8 (289)	
Marital status, % (n)			
Single	6.6 (79)	4.4 (27)	.000 ^b
Married	49.2 (590)	65.5 (405)	
Widow/er	34.4 (413)	27.8 (172)	
Divorced	4.0 (48)	1.3 (8)	
Separated	5.8 (69)	1.0 (6)	
Number of people who live with (Mean \pm SD)	3.40 \pm 2.34	2.19 \pm 0.99	.000 ^a
Employment situation			
Currently working	23.6 (283)	4.5 (28)	.000 ^b
Retired / Pensioner / Disabled	26.3 (315)	65.4 (404)	
Unemployed	15.1 (181)	2.8 (17)	
Housewife	35.0 (420)	27.3 (169)	
Way of working (present or past)			
Self-employee	27.9 (335)	19.3 (119)	.000 ^b
Employee	44.8 (537)	80.7 (498)	
Not applicable	27.3 (327)	0.0	

^a= t test for independent samples, ^b= Chi-square test.

The number of people living at home was also significantly higher in Mexico (Mean=3.4; SD = 2.3) than in Spain (Mean= 2.19; SD = 0.99). The current employment situation was also

¹ Since CASOENAC had the objective not only to make comparisons between Colima and Spain, but among Colima and another Mexican State, Jalisco, two representative samples from Colima and Jalisco States were recruited. Since minor differences between Colima and Jalisco were found, here we are only referring to differences between Mexico (both States) and Spain.

different in both countries. In Spain, most were pensioned or retired (65.4%), in Mexico they were only 26.3%, while 23.6% were currently working and 15.1% were unemployed, compared with 4.5% and 2.8 % respectively in Spain. The majority of the elderly in Spain had worked in their lives as employees (80.7%), compared with 44.8% of Mexicans, as 27.9% were self-employed.

Instrument and Procedures

CUBRECAVI (“Short Quality of Life Questionnaire,” Fernández-Ballesteros and Zamarrón, 1996, 2007) was the instrument selected to assess QoL in this study. It includes nine domains assessed through objective and subjective questions. The first domain is “Physical and mental health”. It assesses subjective health by asking: “In general, how do you rate your health state?” and objective aspects by asking about the frequency of 22 different pains and physical symptoms (i.e. headache, pain in legs, urinary incontinence, etc.) and mental symptoms (i.e. memory problems, being lost, etc.).

The second scale is “Social integration”. It is assessed *objectively* by asking about family members and friends contact frequency (i.e. children, grandchildren, neighbors ...) and *subjectively* by asking to what extent the individual is satisfied with each relationship he/she has. “Functional abilities” is the third domain asking about various difficulties in performing daily life activities. The fourth domain, “Activity and leisure” includes *objective data* asking about the frequency of doing physical activity or sport, as well as to what extent leisure activities are performed (i.e. going to the cinema, doing errands, taking care of their grandchildren...). Also, subjective *data* is collected by asking for the individual’s satisfaction in spending his/her time. “Life satisfaction” is assessed through a *subjective scale* asking about the general appraisal of life.

The sixth domain is “Social and health services” consisting of two items, one related to the frequency of attending these services (*objective*) and the other one related to the satisfaction with them (*subjective*). “Environmental quality” assesses the frequency of some environmental elements (i.e. noise, amenities, luminosity...) and the general satisfaction with them. “Education” and “Income” are both objective scales, by asking for the number of years they received a formal education and the total monthly income received in home. Finally, the CUBRECAVI includes a question asking about his/her appraisal about his/her QoL.

A review of the instrument has been done, adding some little changes and doing some language adaptations for the application in the Mexican sample. From the data of this sample, psychometric analysis (internal consistency and construct validity of its domains) was performed following the analysis done by Fernández-Ballesteros and Zamarrón (1996, 2007). Fernández-Ballesteros, Arias-Merino, Santacreu and Ruvalcaba, 2011).

Reliability analysis has been assessed by internal consistency; Cronbach’s alpha levels run from medium (“Physical and mental health” scale’s $\alpha=.67$) to high (“Functional abilities” scale’s $\alpha=.84$), only one scale (“Social integration”) yielded a low alpha coefficient ($\alpha=.45$). These results are similar to that found by the original CUBRECAVI (“Social integration” scale’s $\alpha=.31$, “Physical and mental health” scale’s $\alpha=.70$ and “Functional abilities” scale’s $\alpha=.92$). Construct validity was tested by an Exploratory Factor analysis (using principal component and Varimax rotation). The variance explained was 62.16% and 65.44% by Mexico and Spain respectively.

The factors obtained were congruent with the theoretical ones raised in both samples. The variance explained is lower than the one explained in the original CUBRECAVI (78.2%), but the factor structure is similar to the one found by Fernández-Ballesteros and Zamarrón (1996, 2007).

Last, but not least, factor convergence analysis showed that the seven factors found in each country were convergent between them (all values equal to or greater than 0.9), which means that QoL structure is closely similar in Spain and Mexico. Nevertheless, in spite of this factorial congruence among countries, there are two indicators that are loading differently in Spain and in Mexico. Thus, Life satisfaction and Subjective appraisal of quality of life are loading in the same factor in the Mexico sample, but in the Spanish sample, Life satisfaction is loading in the Health factor and Appraisal of the quality of life is loading in Education and Income.

Finally, the CUBRECAVI was administered following the Manual by trained interviewers individually in the subject's home.

RESULTS

Health

A comparison among subjective, objective and mental health between Mexico and Spain is shown in Table 5 and graphically in Figure 3. Regarding subjective health, no statistically significant differences between the two countries were found; satisfaction with their current health is between a little and fairly good.

Regarding objective health, differences were also not found. Participants from both countries reported the presence of symptoms and pain between sometimes and never. It was found that, on average, they were suffering from 5 symptoms or pain. In Mexico, the most reported symptoms were: standing to urinate and / or night urination (61.8%), bone, spine or joints pain (59.3%), weakness of legs (48%), fatigue for no apparent reason (48%) and headache (50.5%). In Spain, the most common were: bone pain, spine or joints (77.2%), standing to urinate and / or night urination (61.8%), weakness of legs (55.2%), gases (55.2%) and sleep disorders (50.3%).

Regarding mental health, significant differences were found between the countries ($p=.000$, $t=-4129$, $df=1479$). The Spanish elderly reported better mental health than the Mexicans.

Table 5. Health comparison between Mexico and Spain

Variable	Mexico, (n= 1199) Mean \pm SD	Spain, (n= 618) Mean \pm SD	p-value ^a
Subjective health	2.61 \pm 0.95	2.64 \pm 0.92	.496
Objective health	3.40 \pm 0.47	3.40 \pm 0.39	.986
Mental health	3.02 \pm 0.76	3.16 \pm 0.63	.000

^a = t test for independent samples, SD= Standard deviation.

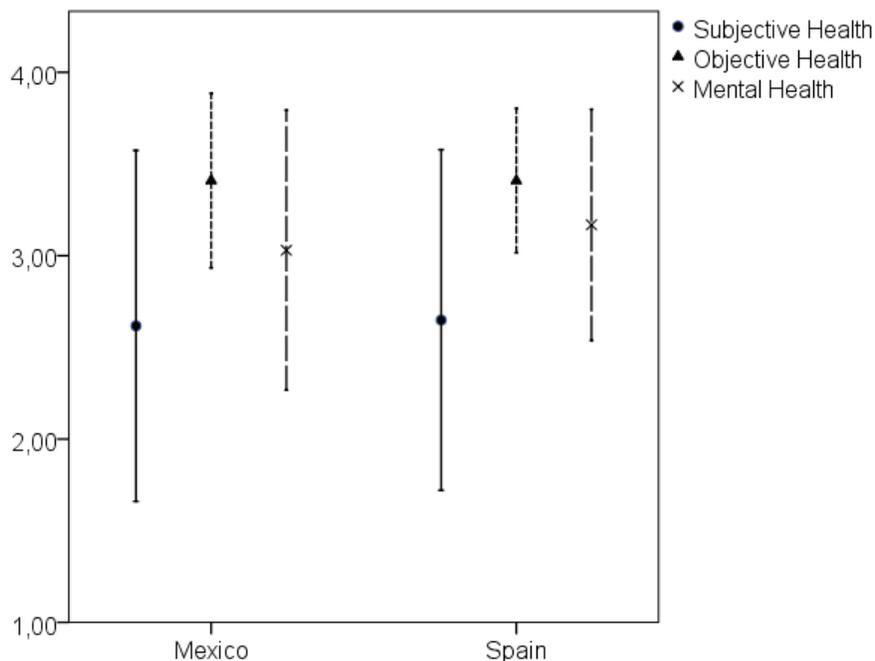


Figure 3. Health comparison between Mexico and Spain.

Functional Abilities

Concerning functional abilities, the Spanish elderly reported significantly less difficulty in performing the activities of daily living than the Mexican elderly ($p=.000$, $t=-6084$, $df=1408$; see Table 6). Specifically, the Mexican elderly had greater difficulty when taking care of their physical appearance, household activities, walking, and in performing outdoor tasks. The self-perception of functionality was also different between the two countries (Table 7), being more positive in Spain, where 83.1% and 43.9% of the participants considered that they were able to perform daily life activities very good (39.3%) and good (43.9%) in comparison with 73.3% compared of Mexican participants (very good 38% and good 35.3%). Also, Mexicans significantly reported more difficulties when performing ADL in comparisons with Spaniards.

Table 6. Functional abilities

Variable	Mexico, (n= 1199) Mean \pm SD	Spain, (n= 618) Mean \pm SD	p-value ^a
Activities of daily living	3.41 \pm 0.78	3.63 \pm 0.67	.000
Taking care of their physical appearance	3.63 \pm 0.80	3.79 \pm 0.57	.000
Doing household activities	3.48 \pm 0.86	3.58 \pm 0.78	.014
Walking	3.28 \pm 0.98	3.61 \pm 0.80	.000
Performing outdoor tasks	3.38 \pm 0.95	3.63 \pm 0.78	.000

^a= t test for independent samples, SD= Standard deviation.

Table 7. Considers that he/she can manage for themselves

Variable	Mexico, (n= 1199) % (n)	Spain, (n= 618) % (n)	p-value ^b
Very well	38.0 (455)	39.3 (243)	.000
Well	35.3 (423)	43.9 (271)	
Some	23.3 (279)	13.1 (81)	
Bad	3.4 (41)	3.7 (23)	

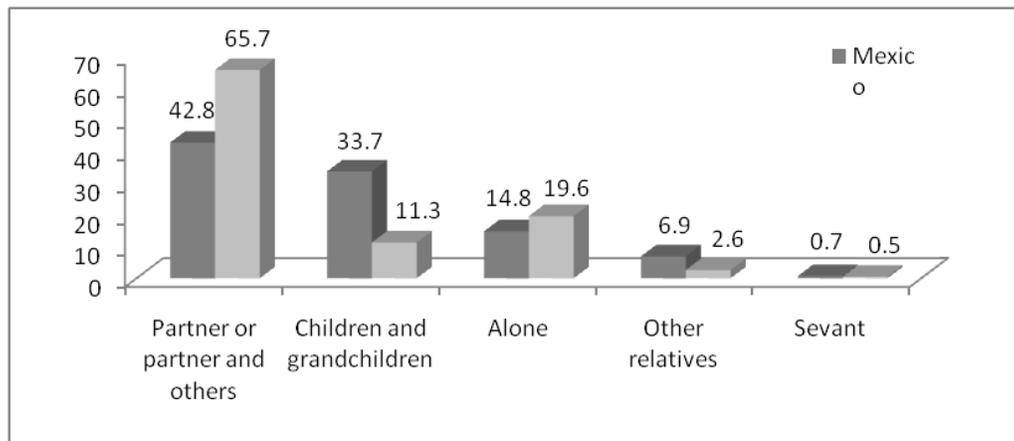
^b= Chi-square test.

Social Integration

The family networks were different between both of the countries ($p = .000$), as shown in Figure 4. In Spain, most of the participants reported living with his/her partner (65.7%), while in Mexico there were only 42.8%, but 33.7% lived with their sons and grandsons, compared with only 11.3% of the Spanish. It was also found that a higher proportion of the elderly lived alone in Spain (19.6%) than in Mexico (14.8%). In both countries, most of the participants said they were satisfied with the relationship they had with the people they lived with (90.8% Mexico, Spain 98.8%, $p = .000$).

Regarding the frequency of family relationships not living in the home, or how often they met other people not living with them, the Spanish elderly interact more frequently with their sons ($p = .000$, $t = -10,562$, $df = 1461$), grandsons ($p = .000$, $t = -8801$, $df = 1317$), neighbors ($p = .000$, $t = -10,074$, $df = 1466$) and friends ($p = .000$, $t = -7551$, $df = 1403$) compared to the Mexican elderly. No differences were found regarding the frequency of relationship with other family members.

In addition, when they were asked about satisfaction regarding these relationships, the Spanish elderly expressed greater satisfaction than the Mexicans in their relationship with their spouse ($p = .000$, $t = -5937$, $df = 948$), sons ($p = .000$, $t = -5397$, $df = 1637$), grandsons ($p = .000$, $t = -5333$, $df = 1558$), other family members ($p = .000$, $t = -8447$, $df = 1692$), neighbors ($p = .000$, $t = 10976$, $df = 1560$) and friends ($p = .000$, $t = -11,495$, $df = 1390$).



$p = .000$, Chi-square test.

Figure 4. Forms of cohabitation (who lives with).

Activity and Leisure

As shown in Figure 5, the physical activity performed by the participants of both countries was significantly different ($p=.000$). It was found that Mexicans, in comparison with the Spanish, were significantly more sedentary (29.2% vs. 13.4%) when performing exercises of low intensity and less frequency (30.4% vs. 24.8%). However, a significant number of Spaniards performed physical exercises of high frequency and intensity (24.5% vs. 11%). It should be highlighted that most of the Spanish elderly (50.8%) reported to perform a medium physical exercise frequency and intensity compared to 15.8% of the Mexican elderly.

Additionally, the Spanish participants reported doing more frequently leisure activities ($p=.000$, $t=-3851$, $df=1815$) and productive activities ($p=.000$, $t=-8479$, $df=1428$) compared to the Mexicans. In both countries, the leisure activities that were reported as being more frequently performed were: watching TV (67.8% vs. 93.5%), listening to the radio (45.1% vs. 48.4%) and reading books, newspapers or magazines (38.5% vs. 38.3%). Likewise, the productive activities that were performed more often were: shopping (Mexico 43.4% Spain 74.8%) and management or payments (40.5% vs. 64.2%). No significant differences were found regarding satisfaction; that is, participants expressed the same satisfaction with the way they spend their time ($p = .798$, $p = .257$, $df = 1815$), 77.3% were very satisfied in Mexico and 83.5% in Spain.

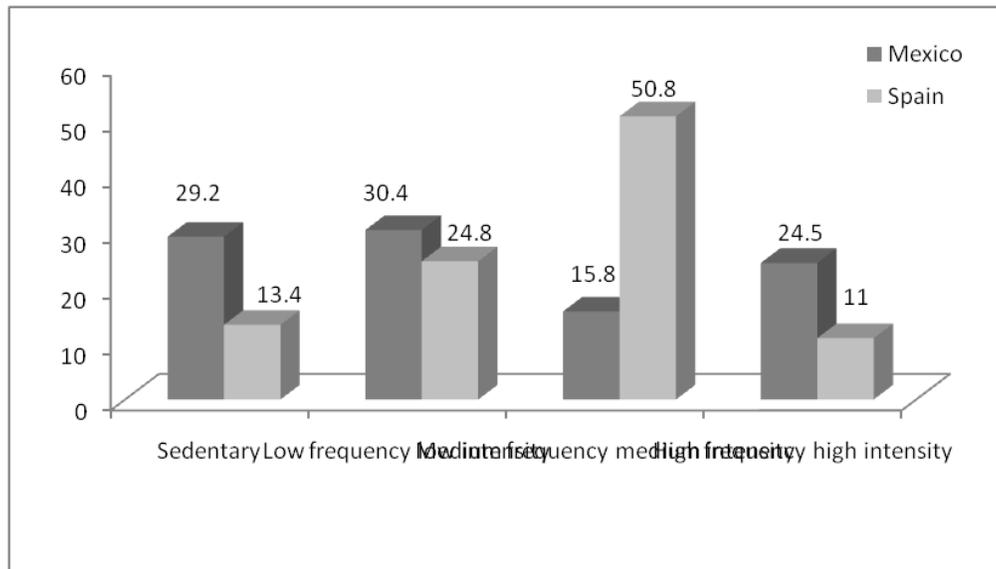


Figure 5. Physical activity performed during the last year.

Environmental Quality

Regarding satisfaction with housing, participants from both countries reported being satisfied to the same extent ($p=.101$, $t=-1642$, $df=1291$), proportionally, 83.2% of Mexicans

and 96.6% of Spanish expressed satisfaction with their home ($p=.000$). Specifically, the Spaniards reported a greater satisfaction than Mexicans regarding: noise/silence ($p=.000$, $t=-10541$, $df=1771$), temperature ($p=.000$, $t=-20386$, $df=1612$), lighting ($p=.000$, $t=-12000$, $df=1727$), housekeeping ($p=.000$, $t=-11445$, $df=1622$), furniture ($p=.000$, $t=-9918$, $df=1814$) and comfort ($p=.000$, $t=-10047$, $df=1792$) in their home.

Life Satisfaction

Mexican participants reported greater life satisfaction than Spaniards ($p=.004$, $t=2854$, $df=1408$). Specifically, it was found that 35.4% of the Mexicans experienced high satisfaction compared with 21% of the Spaniards. Most of the latter (60%) reported fair satisfaction, in contrast to 40.8% of Mexicans. Some satisfaction was reported by 21.7% of the Mexican elderly and 16% of the Spanish, while 2.1% and 2.9% (respectively) reported no satisfaction with life.

Education

Educational levels were lower in participants from Mexico than from Spain, the former had an average of 5.06 (SD = 4.73) years of education compared with 5.96 (SD = 4.37) of the latter ($p=.000$, $t=-3884$, $df=1800$). Specifically, it was found that 17.7% of Mexican elderly were illiterate compared with only 5.3% of the Spanish, 37.9% vs. 44.5% were literate, and 18.1% vs. 33% had completed primary education ($p=.000$).

Income

In this scale, it must be pointed out that 209 Mexicans and 81 Spaniards did not answer. In Spain, people reported significantly more income than in Mexico. In a 9 point answer scale (from 0 to 8), Mexico's average income is 2.23 (SD = 2.39) while the Spanish one is 3.30 (SD = 1.42).

Table 8. Income

Variable	Mexico (n= 1199)% (n)	Variable	Spain (n= 618) % (n)
Less than \$1,500	23.4	Less than 300 €	0.6
From \$1,501 to \$2,500	19.5	From 301 to 450 €	5.0
From \$2,501 to \$3,500	12.1	From 451 to 600 €	19.7
From \$3,501 to \$4,500	8.8	From 601 to 900 €	29.3
From \$4,501 to \$5,500	4.5	From 901 to 1200 €	17.0
From \$5,501 to \$6,500	3.3	From 1201 to 1600 €	8.4
From \$6,501 to \$7,500	3.4	From 1601 to 2100 €	4.2
From \$7,501 to \$8,500	1.8	From 2101 to 2700 €	1.8
More than \$8,501	5.8	More than 2700 €	0.8
Did not know/ did not answer	17.4	Did not know/ did not answer	13.1

Total	100	Total	100
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Table 8 shows that more than 50% of a Mexican's income is concentrated in the first three points of the scale, while a Spaniard's income is concentrated between points 3 and 5.

Table 9. Use and satisfaction on social and health services

Variable	Mexico, (n= 1199) % (n)	Spain, (n= 618) % (n)	p-value ^b
Frequency of use:			.000
Frequently	34.0 (407)	50.3 (311)	
Occasionally	46.3 (555)	47.9 (296)	
Never	19.7 (236)	1.8 (11)	
Level of satisfaction:			.000
Very satisfied	31.9 (342)	36.0 (221)	
Fairly	28.5 (306)	52.3 (321)	
Few	23.6 (253)	9.3 (57)	
Nothing	16.0 (171)	2.4 (15)	

^b= Chi-square test.

Health and Social Services

The Spanish elderly reported a significantly higher use of health and social services - 50.3% reported to use them frequently compared with 34% of Mexicans. In contrast, only 1.8% of Spanish and 19.7% of Mexicans reported not to use them.

The satisfaction with services was higher with the Spanish elderly, 36% and 52.3% who said they were very and fairly satisfied, compared with 31.9% and 28.5% of Mexican elderly, respectively. A greater proportion of Mexican elderly (16%) than Spanish (2.4%) reported being dissatisfied.

Appraisal of Quality of Life

Finally, it was found that the Mexican elderly value their own quality of life significantly higher than the Spanish ($p = .000$, $t = 4775$, $df = 1550$). Mexican participants assessed themselves as high 10.9%, medium 63.7% and low 25.4%, compared with 8.9%, 79.6% and 11.5% (respectively) of the Spanish.

DISCUSSION

First of all, it must be emphasized that, after a theoretical review, we have taken an integrative approach to QoL, trying to embrace a broad, multidimensional and multilevel concept of QoL. In other words, we consider QoL as a *multidimensional* concept integrating

both *objective* and *subjective* conditions and which can be considered at different *multilevels* from populations to individuals.

Regarding QoL at a population level, results shows that even though all of the objective measures are better in Spain than in Mexico, Mexican people report better scores in the subjective appraisal of QoL (i.e. Mexicans report more happiness than Spanish people). But, when we tried to investigate whether age is influencing the subjective appraisal, data from the Word Values Survey, showed that as age increases, “happiness” and “subjective health” decrease, significantly, in Mexico and in Spain. Finally, when we considered people over 65, we found that while differences between Spain and Mexico in “Subjective health” were not significant, Mexicans reported significantly higher “Happiness” than Spaniards (Table 3), as we have previously pointed out, before taking into consideration the general population of both countries.

Taking into consideration *individual QoL* assessed through the *CUBRECAVI*, no significant differences between Mexicans and Spaniards were found regarding subjective and objective *health*, but Spaniards reported better mental health than the Mexicans did. Also, Spaniards significantly reported to have less difficulty than Mexicans in their *Activity Daily Life* as well as being able to perform those activities better. *Social integration* in Spain and Mexico significantly differ, mainly because of the structure of the household; more Spaniards significantly live alone, or live with their partners, while more Mexicans live with their children and grandchildren. Nevertheless, both Mexicans and Spaniards are satisfied with the people with whom they live. According to that, the Spaniards reported significantly more frequent meetings of family members who do not live at home and friends than the Mexicans did. Also, the Spaniards significantly reported to be more satisfied with family and social relationships than the Mexicans did. Regarding *Physical activity*, the Spaniards perform significantly more frequent physical activities and sports and they are significantly more involved in leisure and productive activities than the Mexicans. No significant differences were found regarding appraisal about *environmental quality* among the Mexicans and Spaniards. Spaniards significantly reported higher use of *health and social services* and were more satisfied about services than Mexicans. This could be in accordance with the fact that in Spain, there is a universal public health system and a low percentage of Mexicans have such a system. Mexicans and Spaniards also significantly differ in their *income and education* which is in accordance with differences at the population level.

In spite of the fact that most of the domains of QoL support older Spaniards having a higher QoL than Mexicans, Mexicans significantly reported a higher *Life satisfaction* and, at the end, a higher *appraisal of Quality of Life*. In other words, it seems that the subjective appraisal about satisfaction with life and about quality of life are independent of the other factors, while in Spain they are highly related to them (both objective and subjective quality of life domains) (see, Fernández-Ballesteros, Arias, Santacreu y Ruvalcaba, 2011). This intriguing result is in accordance with the already mentioned Method Section: factor analysis yielded an independent factor of subjective appraisal of life and quality of life in Mexico, while in Spain, life satisfaction is related to health and quality of life is related to income and education. It is interesting to emphasize that Spain is fulfilling the assumption that education and income are behind QoL (Blanchfower and Oswald, 2011) but Mexico is fulfilling the QoL independence (Ashcanasy, 2011, Diener, Diener and Diener, 1995).

The issue about the international comparison in quality of life is discussed throughout literature; let us introduce some arguments claimed by the authors. First of all, after

examining data coming from international studies on subjective happiness (well-being, happiness, satisfaction and quality of life are taken almost as interchangeable terms), Blanchard and Oswald (2011) conclude that a stable pattern has been replicated in several countries, but it is not supported by our results, as our results do not support : 1) *Age* distribution is U-shaped, that is, *happy people* are, among other conditions, disproportionately, *young or old* (not the middle-aged). This pattern is not supported in our study; from context data, age is negatively associated to happiness. As well as Pinquart (2001) pointed out from meta-analysis studies, a positive mood is negatively associated with age, in the same way that from our population data, happiness is decreasing as age is increasing both in Mexico and in Spain. 2) The profile of *happy countries* are, among other conditions, disproportionately *rich and educated* bringing data from the International Social Survey Programme or ISSP; the happiest countries are, in this order: Ireland (coefficient 0.2196), Switzerland (0.1677), and Mexico (0.1559), the United States (0.0939), Great Britain (0.0844), and New Zealand (0.0754). Nevertheless, there are contradictory results coming from other studies (Diener et al., 1995; The Economist, 2005; Vennhofen, 1999) which not support this profile. In our study, at a contextual level, people in Mexico yielded higher scores of happiness than in Spain, both for the total population and also for those older people. In the same line, at an individual level, Mexicans reported a higher appraisal of Life satisfaction and Quality of Life than the Spaniards did, but both at contextual and individual levels, Spaniards have a higher education and a higher income than Mexicans have.

Some authors interpret results about QoL as well-being and happiness, taking into consideration a cultural construct: individualism (other authors, such as Triandis 1995, include a bipolar dimension individualism versus collectivism). Veenhoven (1999) compares 43 nations in the early 1990's.

Individualization is measured by three aspects: 1) moral appreciation of individualism, 2) opportunity to choose, and 3) capability to choose. Next, overall individualization is measured by means of an expert-estimate. Quality-of-life in nations is measured by the citizen's subjective appreciation of life, as assessed by the question of happiness on the World Values Study. She calculated this index in 48 nations in 1990.

The more individualistic (1-10) countries were USA (10), followed by Canada, New Zealand, The Netherlands, and Switzerland (9). The less individualistic countries were China (2) and Nigeria (3). Taking into consideration this conceptualization, the Mexican individualism score was 5 yielding a happiness score of 2.95, while for Spain the individualistic score was 6 with a happiness score of 3.04. In sum, these interesting results from Veenhoven, from an "individualistic" position, do not highlight the differences found between Mexico and Spain in QoL.

In summary, although both objective (contextual) macro and micro (personal) level factors and indicators of QoL are quite higher in Spain than in Mexico, subjective appraisal of the quality of life and life satisfaction are higher in Mexico than in Spain. Much more research must be conducted in order to clarify the meaning of these positive concepts, including the quality of life, satisfaction, happiness or well-being, when they are used in any cross-cultural research and more sophisticated analysis must be conducted in order to make progress in this field.

In synthesis, both objective and subjective conditions assessed at different levels must be requested when QoL studies are conducted. When scientists, or policy makers, wish to

improve the way of living of a certain population, in no way can QoL be reduced only to subjective dimensions.

ENDNOTES

- [1] These were the names of the scientific literature databases.
 [2] Also, at the lower level of the population “context” (“Residence” “Day Care Centre”, “Home”, etc.), these can be assessed through aggregate or global indicators.

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