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#### **Research Article**

# Vitor Quality of Life Scale for the elderly: Construction

#### **Abstract**

The objective of this study was to describe the conceptual model and construction of the Vitor Quality of Life Scale for the Elderly (VITOR QLSE). The following approaches were employed to devise and incorporate new items and dimensions into the scale: qualitative study, literature review, focus group and pre-test performed in 30 older adults. The VITOR QLSE was constructed based on the structure of the Quality of Life Index (QLI) and on a specific methodological structure providing dimensions reflecting the quality of life of older adults. The present instrument may serve as a valuable resource in healthcare practice and research that meets the needs of the scientific community, especially in light of the current dearth of instruments in this area.

## Introduction

Quality of life (QoL) in old age can be conceived as the elder's perception of their daily life based on their rating of activities they are able to perform independently [1]. QoL assessments of older adults must reflect the complexity of activity and adopt multiple criteria for physical, psychological, sociocultural and spiritual aspects. A number of different elements are regarded as determinants or indicators of wellbeing in old age, including: longevity, biological health, mental health, satisfaction, cognitive control and efficacy, social competence, productivity, activity, social status, income, continuity of familial and occupational roles, as well as informal relationships with friends [2].

While studies and assessments of QoL have proven timely and important in various social, population and disciplinary segments, they also especially relevant in the elderly population, given this group has inherent characteristics and needs that can impact QoL if unidentified. Therefore, the need exists for specific instruments assessing this segment of the population, since generic scales do not encompass the specific aspects and reality of this group.

It is noteworthy that the instruments used for assessing QoL tend not to be adaptable for older adults, whether owing to their single-dimensional approach or because elderly rating their QoL as "good" may not be classified as such according to the interpretation of the instruments. Thus, there appears to be a set of characteristic multi-dimensional aspects that define QoL in the elderly age group [3,4].

Developing a QoL scale for elderly is especially important, in view of the specificities of this age group and its increase as a proportion of the world population [3,5]. On the other hand, the full development of a new measuring instrument in health is complex, requiring numerous resources and the mobilization of skills and knowledge in many different fields. Faced with this need, researchers should be aware that suitable methods must be adopted to ensure the new instrument produced is both appropriate and reliable.4 Hence, instruments should be devised when they are lacking and required.

The interest in devising an instrument for assessing QoL of elderly lies in the fact that it cannot be assumed, as outlined earlier, that instruments suitable for young adults are also appropriate for use in elderly populations. Specificities for different age groups exists. In addition, the magnitude of the aging phenomenon, allied with the scarcity of instruments for assessing it, further drives this interest. With regard to QoL assessment in older adults, few instruments with an emphasis on elderly individuals have been developed [6].

The literature reviewed shows that for assessments of QoL in this population, generic instruments devised and validated in other age groups and employed in investigations of any age group have been used. This finding corroborates the results of Paschoal [7]. No instruments for assessing elderly were found in Latin American, whereas in Brazil only the WHOQOL-OLD [8], produced by the World Health Organization Quality of Life Group (WHOQOL Group) was available. This instrument comprises 24 items divided into six facets: "Sensory abilities"; "Autonomy"; "Past, present and future activities"; "Social participation"; "Death and dying"; and "Intimacy".

However, according to the statistical projections of the World Health Organization, Brazil is set to rank sixth in the world in contingent of elderly by 2025. Currently, the elderly represent 8.6% of the Brazilian population, a contingent of 15 million people aged 60 or older. In 2025, this figure will rise to 15%, i.e. Brazil shall have a population of 32 million older persons [9].

These aspects point to the need for developing multidimensional instruments that are sensitive for capturing the variability of different groups of elderly and their QoL. These instruments should cater for the inherent characteristics of this age group, where older adults differ from younger groups in terms of values, culture and life experiences. Moreover, agerelated factors impact health, a vital dimension for QoL in old age, while a host of different social circumstances (retirement, being widowed, dependence, loss of autonomy and social roles, among others) can become obstacles to a better quality of life. All of these factors raise the complexity of measuring the QoL of older adults [7].

For the reasons outlined above, the aim of this study was to devise a QoL measuring scale for elderly which reflects their context and reality concerning health, family, autonomy, environment, social and psychological aspects, as well as physical independence. To this end, the Quality of Life Index (QLI), a generic QoL scale, was transformed into a specific version for older adults to assess QoL of this segment of the population. The relevance of this new measure lies in its utility for health care, at individual and group levels, and for research in elderly individuals. The instrument can, besides being a specific measure, benefit the elderly population in a many different situations and phases of life.

Given these aspects outlined, the objective of the present article was to describe the development of the conceptual model and report the construction of the Vitor Quality of Life Scale for the Elderly derived from the QLI. The objective of this study was to describe the conceptual model and construction of the Vitor Quality of Life Scale for the Elderly (VITOR QLSE).

# **Methods**

The following approaches were employed to devise and incorporate new items and dimensions into the scale: qualitative study, literature review, focus group and pre-test performed in 30 older adults. The VITOR QLSE was constructed based on the structure of the Quality of Life Index (QLI) and on a specific methodological structure providing dimensions reflecting the quality of life of older adults.

- Development of the original version of the quality of life index (QLI)

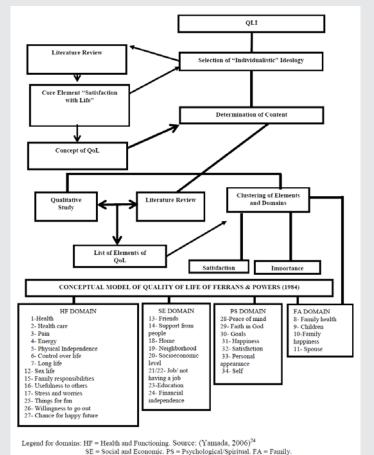
Permission was granted by Dr. Carol Estwing Ferrans for use of the QLI – generic version III – which formed the theoretical framework for constructing the Victor Quality of Life Scale for the Elderly – VITOR QLSE in the present study. The QLI was devised in 1984 by nurses Carol E. Ferrans and Marjorie Powers, professors at the University of Illinois (USA).

The authors used a number of different research approaches to build the instrument [10-12].

The stages adopted by the authors to produce the QLI are depicted in the explanatory diagram taken from the article of Yamada (Figure 1) [12].

The studies for devising the conceptual model of QoL commenced in 1982, as part of the Doctoral thesis of the original author, and comprised two stages: the first stage entailed a literature search to identify the core element most congruent with the individualistic ideology chosen to develop the instrument [13]. This type of approach was based on the premise that only the individual can assess their QoL, given the things people value differ [14]. Thus, among the core elements found, the author adopted satisfaction with life, from which the concept underlying the instrument was derived: "quality of life is a person's sense of well-being that stems from satisfaction or dissatisfaction with the areas of life that are important to him/her" [15].

The second stage involved three approaches. The first of these approaches sought to determine the components of a satisfactory life from the perspective of 40 patients undergoing dialysis using a qualitative survey. The second approach in this stage comprised a comprehensive review of the literature related to QoL, from which the authors produced a list of QoL dimensions.<sup>10,11</sup> Combining the data derived from the qualitative survey of patients undergoing hemodialysis and from the



SE = Social and Economic. PS = Psychological/Spiritual. FA = Family.

Figure 1: Diagram of development of the Ferrans & Powers QLI.

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literature review led to a list of 32 elements assessing overall QoL, plus a further three specific complementary elements for patients on dialysis [10,11,16].

The 32 items identified formed the basis for structuring the QLI into two parts: the first assessing satisfaction with life and the second containing those same items but assessing the importance that the individual attributes to each item or element [13,15]. Consequently, the number of questions to be answered is doubled.

Lastly, the third approach of the second stage involved clustering items into the QoL domains. With the aim of establishing the nature and number of domains, in another study, the data obtained were submitted to statistical procedures of exploratory factor analysis.<sup>13</sup> For the QoL scores, the attribution of values is carried out by a 6-point Likert-type scale ranging from "very dissatisfied" to "very satisfied" and from "very unimportant" to "very important" for the satisfaction and importance parts, respectively [13,15]. The QLI was adapted for Brazilian culture and validated in 1999 among patients recruited from intensive care units by Kimura [16].

- Development of the original version of the victor quality of life scale for the elderly (VITOR QLSE) from the quality of life index (QLI)

In the construction of the present instrument, akin to Ferrans and Powers, the individualistic approach was retained, based on the premise that only the individual can assess their QoL, because what people value differs.<sup>14</sup> With regard to the elderly individuals, they are expected to rate their life based on satisfaction with various aspects, such as the assistance received for their needs and the resources made available to them. For the definition of the construct of QoL in elderly, the same generic definition established by Ferrans and Powers for the QLI was adopted to serve as the basis for devising the present instrument. This definition was chosen because it is more congruent with the individualistic approach and more coherent with the purpose of the recently devised instrument, namely: "quality of life is a person's sense of well-being that stems from satisfaction or dissatisfaction with the areas of life that are important to him/her" [15].

With regard to the working definition, as per Ferrans and Powers, efforts were made to develop it in the present study to cover the specificities of the elderly population and, therefore, a list of categories pertinent to the QoL of elderly was produced. To this end, contents about aging and QoL in old age were employed [17–19]. However, the need to incorporate new items and domains was evident, because the existing elements failed to cover certain important aspects of QoL of elderly, such as physical independence and the environment. Therefore, a review of the Brazilian literature on QoL of older adults was carried out, resulting in new domains and items which were added to the original version. This led to the VITOR QLSE I (first version).

Besides these methodological procedures employed for constructing the first version of the VITOR QLSE, the following strategies were used: 1- Focus Group; and 2- Pre-test, described below:

## 1- Focus Group

Having constructed the first version of the VITOR QLSE containing 60 items, the same criteria used previously were employed in the Focus Group (FG) stage. This was carried out based on Backes, Colomé, Erdmann & Lunardi, adopting the technique established by these authors, while in parallel, the methodological adaptations required for the participants were made [20].

The FG is a technique for producing data that involves forming a group with common characteristics, led by a moderator, which focuses participants on a discussion about a particular topic. Using this technique, ideas, experiences, feelings, beliefs, behaviors and points of view can be shared, promoting reflection and also changes of opinion or bases of the initial position [22].

The FG comprised 14 elderlies with concluded and unconcluded third-grade education, concluded or unconcluded secondary education, concluded and unconcluded first-grade, as well as individuals with no education, where each educational stratum contained two participants. Participants were 60 years or older and included men and women. Mean age was 78.8 years and SD+ 2.1; 52% were women and all were from urban neighborhoods of Itajubá city, Minas Gerais state, Brazil. The individuals in the focus group were selected intentionally, adopting the following inclusion criteria: preserved cognitive and communicative abilities, as assessed by the Mental Assessment Questionnaire [22], different educational levels, and oral communication skills.

Five FG sessions were held in the evenings, one per week for five consecutive weeks. The first session centered on the following topics: 1) presentation of the study objectives; 2) general explanation about the study; 3) questions and answers regarding queries; 4) signing the Free and Informed Consent Form; 5) presentation and discussion of each item to reach consensus on meanings, where 30 out of the total 60 items were covered; 6) session wrap-up; 7) conclusions; and 8) time for socializing.

The second session included the following activities: 1) signing the consent form; 2) review of the previous session's conclusions; 3) presentation and discussion of the 30 remaining items, until reaching full consensus on the meaning of each item; 4) conclusions; and 5) time for socializing.

The third session consisted of: 1) signing the consent form; proposal of new items in response to the question: "What other issues not covered in the instrument affect your quality of life?"; 2) discussion about the new items suggested. The fourth session involved signing the consent form, confirmation of the consensus on the items presented, and validation of those items. The fifth and final session included signing the consent form, validation of the entire discussion held during the previous sessions, further suggestions, acknowledgements, closure and social gathering.

The sessions were conducted in compliance with the ethical aspects of the study and also with Ministry of Health Resolution 466/12, respecting the principles of autonomy, anonymity and privacy. The data were collected after approval of the study (Permit  $n^0$  957/08) by the Research Ethics Committee of the University of Sapucaí, Pouso Alegre, Minas Gerais state.

The coordinator of the five sessions was the first author of this study. He had the assistance of two teachers and two nursing academics. They were responsible for the recording, data registration and noting down the suggestions related to the items. Two notebook computers were used to key in this information *in loco*, along with two recording devices. The assistants were also responsible for observations regarding the group and for clearing up queries and doubts.

The coordinator, prior to each FG session, presented the objectives of the meeting to the participants, together with all topics on the agenda, resolved any queries and provided guidance on participant activities. It was made clear to participants that they were free to decide whether to carry on with the sessions or otherwise and could withdraw at any time. Subsequently, each participant agreed to take part, with respective signing of the free and informed consent form. Shortly afterwards, the activities commenced with full participation of the elderly persons and the FG team. During the sessions, a calm, quiet and relaxing environment was maintained with interaction and the best possible relationship with the participants.

After all these procedures and closure of each FG session, the researcher met with the team who together registered the content of the discussion of the group and performed the complete registration in audio, from start to finish of the sessions. The recording devices were switched on at the start of sessions, following permission of the participants, and were only turned off after all participants had left the venue. Average session duration was two hours. This time period allowed coverage of the agenda properly without causing tiredness, loss of attention or concentration of the participants. The elderly were active, participative and promoted highly pertinent or adequate discussions throughout the sessions.

The coordinator of the FG sessions and the other team members discussed, analyzed and considered, after each session, all of the records, observations and recordings. The team then confirmed and approved the replacement of words from the items by their synonyms to improve clarity, and new items were included about: special lines and spaces in public institutions, the comfort and safety of city buses and others. The items discussed and their respective modification after the FG are given in Chart 1. Chart 2 depicts the topics discussed and their respective additional items proposed by the elderly during the FG. After this, the VITOR QLSE II, i.e. the second version of the instrument, comprising 70 items was produced, with the addition of ten items from the FG.

Chart 1: Items modified after Focus Group

ITEMS BEFORE FOCUS GROUP	ITEMS MODIFIED AFTER FOCUS GROUP
1. The intensity of pain you feel?	1. The amount of pain you feel?
2. The intensity of pain you feel when performing activities of daily living?	2. The amount of pain you feel when performing activities of daily living?
3. Your ability for care without the help of others?	3. Your ability to take care of yourself without the help of others?
4. Your possibility of living as long as you wish?	4. The possibility to live many years?
5. The amount of concerns you have?	5. The amount of concerns you have in your life?
6. Your house, apartment or place where you live?	6. Your house or apartment?
7. Your educational level?	7. Years of education you completed?
8. Your leisure, fun activities?	8. Your leisure and fun activities?
9. Your peace of mind, tranquility?	9. Your peace of mind and tranquility?
10. Your overall happiness?	10. Your happiness?
11. You in general?	11. Yourself?
12. Your ability to make choices?	12. Your ability to make your own choices?
13. Your safety at home?	13. The safety you feel in your house or apartment?
14. Your ability for movement?	14. Your ability to move your arms and your legs?
15. Your ability to get out of bed or up from a seat or chair?	15. Your ability to get out of bed, a seat or chair?
16. Your ability to get in and out of cars?	<b>16.</b> Your ability to get in and out of cars or buses?
17. How is the family?	17. How is your family?
18. The departure of children from home to wed or study?	<b>18.</b> The departure of children from home to wed or study, work or for other reasons?
19. Life choices of your children?	19. The professional choice of children?
20. Your life experiences?	20. Your current life experiences?
21. The amount of income (or pension) you receive?	21. The amount of pension or income you receive?
22. The safety you feel when in public roads?	22. Safety in public roads?
23. Your ability to make decisions?	23. Your ability to make decisions on situations that arise in your life?



24. Appreciation by family members?	24. Appreciation expressed by family members?
25. Appreciation by other people and society in this phase of your life?	25. Appreciation expressed by other people and society in this phase of your life?
<b>26.</b> Opportunities (personal, family and professional) you have had during this phase of life?	26. Opportunities that have arisen for you in this phase of life?
27. Types of assistance received from people?	27. Assistance received from people?
28. Types of sidewalks in streets, avenues, squares and boulevards in your city?	28. Condition of sidewalks, boulevards, squares, streets and avenues in your city?
29. Elevator and or handrail/ramp and in buildings or other places you frequent?	<b>29.</b> The availability of elevator and or handrail/ramp and in buildings or other places you frequent?
<b>30.</b> Types of circulatory buses?	30. City buses?
31. Places with public assistance (banks)?	31. Public assistance received in banks, supermarkets, stores and other places?
32. Your friendships?	32. Removed because item "Your friends?" exists.
<b>33.</b> Response options for satisfaction domain: "very dissatisfied"; "moderately dissatisfied"; "slightly dissatisfied"; "slightly satisfied"; "moderately satisfied" and "very satisfied".	<b>33.</b> Response options for satisfaction domain: "very dissatisfied"; "dissatisfied"; "neither satisfied, nor dissatisfied" "satisfied" and "very satisfied".
<b>34.</b> Response options for importance domain: "very unimportant"; "moderately unimportant"; "slightly unimportant"; "slightly important"; "moderately important" and "very important".	34. Response options for importance domain. Not important, "slightly important,"

Chart 2: Issues and additional items proposed by the elderly in the Focus Group

chart 2: Issues and additional items proposed by the elderly in the Focus Group	
What other issues not included in the instrument impact your quality of life?	Additional items proposed by the elderly in the focus group
1 - Health:	
Medicines	· The amount of medicine you take?
	· The effects of the medicine you take?
Memory	· Your memory?
2 - Social Dimension	
Neighborhood	· The neighborhood where you live?
	• The safety you feel in the neighborhood where you live?
3 - Environment	
Comfort and safety in city buses	· The comfort and safety of buses in your city?
	<ul> <li>The existence of reserved lines in banks, supermarkets and other places?</li> </ul>
Lines	<ul> <li>The number of reserved lines in banks, supermarkets and other places?</li> </ul>
	<ul> <li>The existence of reserved parking spaces in banks, supermarkets and other places?</li> </ul>
Reserved parking spaces	<ul> <li>Number of reserved parking spaces in banks, supermarkets and other places?</li> </ul>

#### 2- Pre-test

The pre-test involving 30 older adults that did not take part in the FG was then carried out. The same sociodemographic characteristics and inclusion criteria as the FG participants were adopted, with an average of four respondents per education level. Non-probability sampling was employed using the deliberate or judgmental technique.

The procedures for performing the pre-test were as follows: living in one of the three selected districts in the city of Itajubá: Avenida, Boa Vista or Varginha. These districts were chosen for their ease of access. Ten interviewees were selected from each community; meetings with the elderly were scheduled by day and time; subjects were invited to take part

in the study, and objectives and the study as a whole were explained. Participants agreed to take part by signing the Free and Informed Consent Form. Direct-structured interviews were conducted at participants' homes in a quiet environment with no external disturbances. Among participants, 62% were women; mean age was 79 years and SD+ 2.5, and 38% had unconcluded first grade education.

All items were fully understood and there was no need to make changes to the content for these. For this version, the 70 items of the VITOR QLSE II were divided into eight theoretical domains: 1) health (13 items); 2) psychological/spiritual dimension (10 items); 3) social dimension (10 items); 4) family (9 items); 5) citizenship (7 items); 6) physical independence (5 items); 7) autonomy (4 items); and 8) environment (12 items). These data are in-line with the literature, affirming that QoL scales are multi-dimensional, particularly for older adults. Such scales, besides being multi-dimensional, contain domains specific to this age group 7.

Using this structure, the VITOR QLSE III (third version) was devised for application in the final sample. The development process for the VITOR QLSE III is depicted in figure 2.

## **Results and Discussions**

The VITOR QLSE was developed within a transcultural perspective for measuring QoL in older adults. The scale constitutes a specific complementary instrument on QoL in older adults which provides additional information about the phenomenon in this population, an area lacking scientific, social and cultural information. This ideology is corroborated by Santos & Gutierrez, who stated that scales on conditions that make up QoL in old age, along with their variations, are of great importance in providing information of a scientific and social nature [23].

Specific instruments can further understanding on the limits of humans and also help in the creation of alternative interventions for this growing contingent of the population [24]. In this respect, active healthy aging, now strongly

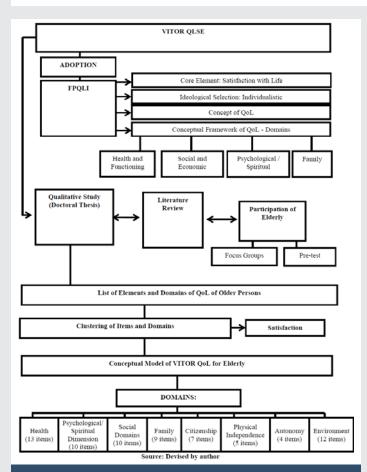


Figure 2: Flowchart of development process of the VITOR QLSE.

recommended and encouraged, i.e. in fully mature individuals, involves forging relationships, interacting with other elderly and the community in coordination with schools, community centers, universities, public authorities, forming a network with partners sharing the same goals. This means functional aging or with functional capacity, namely, full maintenance of physical and mental abilities achieved throughout the course of life [25–27].

Group leisure activities and interactions, a growing area, contribute to both the maintenance of the biopsychosocial balance of elderly and toward attenuating potential environmental and personal conflicts [25]. Increased life expectancy and QoL can be associated not only with advances in technology and medicine but also with elderly living in the family, community and groups, transcending physical and leisure activities [28].

It is also necessary to assess the health of older adults, together with other factors determining QoL (social, political, economic, environmental, cultural, autonomy, physical and individual independence, among others), given that they are inherent to this population [28]. However, this is only feasible and evident through the use of validated and reliable QoL instruments designed specifically for this population. On the other hand, the aging process, which occurs gradually in developed countries, accompanied by improvements in health system coverage, as well as in housing, basic sanitation, work and diet, is taking place rapidly in Brazil. This occurs within

a context of social inequality, weak economy, rising poverty levels, with limited healthcare service access and funds, yet without the structural changes needed to cater for the demands of this emerging age group. The occurrence and incidence of these aspects also calls for QoL assessment through the use of scales that cover, and are sensitive to, these situations inherent to the lives of Brazilian elderly [7].

The main differences between this instrument and others related to QoL of elderly lie in the active participation of the older adults in the process of devising the scale. This participation allowed the inclusion of new, hitherto uncovered items in this scale and those already available, thereby consolidating the domains that incorporated the additional items. In addition, the VITOR QLSE includes domains also present in other scales (health, family, autonomy and social aspects), but also contains domains on citizenship, the environment and physical independence, representing new aspects and models in the QoL of elderly.

Comparison against the WHOQOL-OLD scale, currently regarded as an excellent scale for the Brazilian context on QoL in older adults reveals, as outlined previously, 25 items divided into six facets: "Sensory abilities"; "Autonomy"; "Past, present and future activities"; "Social participation"; "Death and dying"; and "Intimacy". This characterizes a multifaceted instrument comprised by domains that reflect older people's lives and current reality. Comparison with the VITOR QLSE shows that the scale also has the same characteristics, i.e. it is multi-dimensional and contains domains that reflect the contemporary life of elderly today, albeit viewed in a different way or in other contexts.

However, comparison of the domains of the two scales reveals that the VITOR QLSE encompasses other dimensions not covered by the WHOQOL-OLD, such as: "Psychological and spiritual dimension"; "Family"; "Citizenship"; "Physical independence"; and "Environment".

Although the relevance of the physical, social and psychological domains is confirmed in the literature, affirming that normally these elements explain QoL of older adults, these domains do not always have a strong influence on overall QoL. In a study conducted by Vagetti et al [29]. physical domains and environment exhibited the strongest associations, i.e. elderly with a negative perception of these domains were twice as likely to also have a negative perception of health. In conclusion, programs for promoting health and QoL in low-income elderly should focus actions on physical and environment aspects of QoL. This may be due to the fact that, in certain realities and environments, the short distances between places, such as cities located in the interior, make getting around and social interaction among individuals easier. Other examples include contact with the neighborhood which normally occurs among older persons, transport by bicycle, and participation in third age groups or other of personal interest.

The subjective assessments of QoL in elderly should be concerned with the experiences of the individual throughout different stages of aging, from physical changes to loss of social appreciation that result from retirement, considering their feelings and interpretation of these situations, their psychological gains and losses, as well as frustrations and aspirations. In other words, new and additional factors should be embraced according to current circumstances of life, its context and reality. Aging is a heterogeneous experience. Each elder organizes life according to their values, perspectives, living standards and experiences. Taking into account this diversity of occurrences or situations makes measuring QoL in older persons complex and challenging, given the multiple determinants of the construct in this population [7].

Corroborating the points outlined earlier, QoL of elderly encompasses many different highly diverse criteria, where various factors are recognized as determinants or indicators of QoL in old age: longevity, biological health, mental health, satisfaction, cognitive control, social competence, productivity, cognitive efficacy, social *status*, continuity of familial and occupational roles, as well as informal relationships with friends.

QoL has become central in the context of human life, especially among older persons. Studying this phenomenon can yield benefits for this segment of the population in alerting to the aspects which impact the life of aged individuals. This study can contribute toward furthering knowledge on this area and also alert scholars involved in this field to the need for future studies [30].

#### **Conclusions**

Therefore, it can be concluded that this study has made the following contributions:

- From a theoretical standpoint, the study led to the construction of a new scale for assessing quality of life in the context of elderly from their perspective, since they had a say in shaping the original items and constructing new items, based on domains which they deemed important and not hitherto covered by the scale, thereby bridging a gap in knowledge in the literature.
- From a practical perspective, this study provided a QoL assessment instrument which can help identify aspects that need improving in the lives of elderly and strategies for promoting improvements in QoL. In addition, the study can further understanding of this construct in the aging process. Quality of life among elderly is a complex phenomenon that warrants further investigations, reflections and alternative approaches.

QoL reflects the individual's perception of their position in life in the context of the culture and value systems in which they live and therefore determines their uniqueness as a person.

Lastly, it is important to note that the VITOR QLSE has undergone the process of reliability and validity checking and can be recommended as a valid and reliable instrument for measuring the concept of QoL in elderly. The present instrument may serve as a valuable resource in healthcare practice and research that meets the needs of the scientific community,

especially in light of the current dearth of instruments in this area

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