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Artículo Original

Design and validation of a satisfaction scale in leisure/recreation activities of the elderly

Diseño y validación de una escala de satisfacción en actividades de ocio/recreación de personas mayores

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RESUMEN

Introducción: La participación en actividades de ocio muestra una mejora del bienestar físico, cognitivo y social. El ocio es una de las diversas ocupaciones que abordan los terapeutas ocupacionales. La limitada disponibilidad de herramientas de evaluación que abordan el ocio, especialmente en adultos mayores, restringe el uso terapéutico de actividades de ocio auto-seleccionadas destinadas a mantener o mejorar la calidad de vida. **Objetivo:** El objetivo general de la investigación fue validar el instrumento "Escala de Satisfacción de las Actividades de Ocio/Recreación de las Personas Mayores (SSLRAE)". **Material y métodos:** Estudio de validación cuantitativo sobre el SSLRAE. Se llevó a cabo en tres fases: 1) Desarrollo de la herramienta con base en una revisión bibliográfica y análisis de otras escalas; 2) Exploración de validez de contenido con expertos (n-5); y 3) Administración de la SSLRAE a adultos mayores (n=40) para proporcionar datos descriptivos sobre la medida y explorar la consistencia interna. **Resultados:** La prueba piloto del SSLRAE de 10 ítems se realizó con una muestra de 40 adultos mayores de 65 a 86 años ($\bar{x}$ 75,9). El 66 % de los participantes declaró participar en actividades de ocio los siete días de la semana. El 54 % de los participantes se mostró muy satisfecho con sus actividades de ocio. La consistencia interna de la medida reveló un coeficiente alfa de Cronbach de 0.73, lo que indica una consistencia interna aceptable. **Conclusión:** La SSLRAE demuestra una validez de contenido y consistencia interna aceptables como método para evaluar la ocupación principal de los adultos mayores, asociada con su bienestar general. Se requiere una mayor exploración de otros aspectos de la validez.

Palabras clave: Ocio, calidad de vida, adultos mayores, actividades, diseño, validación.

SUMMARY

Introduction: Engagement in leisure activities shows improvement in physical, cognitive, and social well-being. Leisure is one of several occupations addressed by occupational therapists. The limited availability of assessment tools that address leisure particularly in older adults restricts the therapeutic use of self-selected leisure activities aimed at self-selected leisure activities aimed at sustaining or improving one's quality of life. **Objective**: The general objective of the research was to validate the instrument "*Satisfaction Scale of Leisure/Recreation Activities of the Elderly* (SSLRAE)". **Material and methods**: A quantitative, validation study on The SSLRAE was carried out in three phases: 1) Development of the tool based on a bibliographic review and analysis of other scales; 2) Exploration of content validity with experts (n-5); and 3) Administering the SSLRAE to older adults (n=40) to provide descriptive data about the measure and to explore internal consistency. **Results:** The 10-item SSLRAE was piloted with a sample of 40 older adults aged 65-86 years ($\bar{x}$ 75.9). 66% of participants reported engaging in leisure activities seven days a week. 54% of participants were highly satisfied with their leisure activities. Internal consistency of the measure revealed a Cronbach's alpha coefficient of 0.73, indicating acceptable internal consistency. **Conclusion**: The SSLRAE demonstrates acceptable content validity and internal consistency as a means to assess a primary occupation for older adults associated with their overall wellbeing. Further exploration of other aspects of validity is needed.

Keywords: Leisure, quality of life, elderly, activities, design, validation.

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Introduction

Leisure is an occupation that remains throughout one's lifespan and provides unique meaning to each person [1]. Regarding leisure, recreational activities are described as activities that bring pleasure, joy, and meaning to our lives and might include physical and outdoor activities, cultural events, and social activities [2]. Well-being among all age groups is associated with engagement in recreation and leisure activities via several mechanisms, including 1) social interaction, 2) providing meaning, 3) community engagement, and 4) increasing physiologic and cognitive functioning. Leisure and recreation are about more than relaxation in that participation can enhance confidence/self-esteem, autonomy, and help to reduce stress and disability [1, 2, 3].

Benitez and colleagues [4] and Chen and Chippendale [1] articulate how views on recreation have changed as society has evolved from industrial to service economies, thus providing more free time to engage in recreation or leisure. In some work environments, leisure/ recreation activities are part of the benefits, and many communities are increasing recreational facilities for all age groups [1].

The WHO [5] estimates that by the year 2050, the population of people over age 60 will double to 2.1 billion people, and data for Mexico is also showing marked increases in the aging population [6], therefore programming for older adults will become more critical. Paggi et al. [3] note that as lifespan increases older adults may have more years of their lives to spend on leisure pursuits. Their research found that a reduction in leisure activities associated with age is frequently the result of physical limitations; therefore, practitioners working with the elderly should develop strategies to help engage people in leisure pursuits [3]. The WHO [5] asserts that a public health response to aging must facilitate supportive physical and social environments where people can engage in essential activities to reinforce adaptation and psychosocial growth. Within the field of occupational therapy, Chen and Chippendale [1] assert that leisure should be a goal of intervention. They add that engagement in leisure enhances the quality of life, reduces depression and cognitive decline, and adds to overall functioning in activities of daily living. Marr and colleagues [7] contend that since leisure activities might be incorporated into intervention, the most appropriate measurement tools must be developed.

Occupational therapy (OT) involves "the therapeutic use of occupations of daily living with individuals, groups, or populations (i.e., the client) for the purpose of enhancing or enabling participation" [8], such that intervention in occupational therapy leads to the habilitation, rehabilitation, and promotion of the health and well-being of clients whether there is a disability or disabling process. Among these occupations of daily living, we find self-care, work or productive activities, and leisure. Leisure activities can be used in occupational therapy as an intervention modality or a means to improve specific skills, as an intervention objective or goal [1], as a reward, and as an emotional stimulant.

An evaluation of leisure is required to engage clients in leisure pursuits, which provides specific information for each person [8]. In terms of assessment of leisure abilities, tools such as the GENCAT Quality of Life Scale Form [9] and the Occupational Performance History Interview (OPHI-II) [10] contain brief information related to leisure/recreation. However, they are not specific to perform a complete evaluation of engagement in leisure/recreation.

Many institutions, hospitals, or clinics have services or rehabilitation programs that aim to prepare the patient to return to their activities or improve functioning and quality of life. In these programs, clinicians use various models and programs focused on engagement and satisfaction with leisure skills derived from the chosen activities. Little to no literature was found that specifically addressed satisfaction with leisure other than a few studies measuring the quality of life (QOL) in which participants answer a few questions regarding participation in leisure [11, 12] No literature was found that specifically mentions assessment/ measurement of engagement in leisure for older adults in the context of rehabilitation services. Nor was a specific measure that exclusively values the

items of leisure/recreation in older adults found. Additionally, none are translated or validated into Spanish which limits the availability of and application of these assessment tools with Spanish speaking populations.

This study aimed to validate a measure designed to assess satisfaction ofleisure/recreation activities in older adults. This process involved exploration of the tool's content validity and internal consistency of the items it purports to assess. Further, it offered an opportunity to report descriptive data about leisure/recreation engagement and satisfaction among older adults.

The use of a standardized assessment has the potential to influence services for older adults by providing personalized social and rehabilitation programs. Similarly, it is expected that with the results obtained in this study and their dissemination, various professionals might use this tool to develop client centered programs that benefit the elderly population, both in terms of health promotion and rehabilitative care. Finally, assessing satisfaction of leisure and recreation considers personal and collective leisure experiences in which older adults engage potentially contributing academic research in this area

Methods

No funding was received for this study. The Ethics Review Committee approved the study at Universidad Autónoma de Yucatán. A quantitative, cross-sectional assessment validation study was conducted. The study's primary objective was to design and validate a newly developed measure for evaluating satisfaction with leisure/recreation activities in older adults. The study consisted of exploring the face and content validity of the newly developed assessment tool as well as exploring the reliability of the tool via measurement of internal consistency (via Cronbach's Alpha).

Table 1 describes the phases of the study, including the procedures, the sample size, inclusion criteria, and research activities for each phase of the study. Content validity was assessed via an expert panel of clinicians with expertise in working with older adults. Descriptive data regarding survey responses and internal

Table 1: *Overview of the study phases, samples, and data collection strategies*.

Phase of the study	Sample	Inclusion/ Exclusion	Data collection methods
Development of draft of the measure	n/a	n/a	Use current literature to develop items
Presenting the draft measure to clinician experts for Content validity	Expert panel of occupational therapy specialists (n=5)	Inclusion: ● Minimum of 2 years' experience ● Must have experience working with older adults	Present measure to expert panel members for rating each item on essentiality, clarity, applicability to older adults. Calculate percent agreement
Revising the measure based on feedback	n/a	n/a	Remove items that do not meet .75 or > agreement
Pilot testing the new measure with older adults. ● Descriptive data regarding the new measure	Convenience sampling (community-dwelling men and women over 65 years of age participants in a community program for socialization	● Under age 65 ● Unable to read or fill out questionnaire ● Living in an institution	Ask participants to fill out questionnaire regarding their experiences/ perceptions about involvement in leisure. Provide descriptive data
● Internal Consistency			Calculate a Cronbach's alpha to explore the coherence of the measure

consistency was obtained from a sample of community-dwelling older adults. Both participant groups were obtained via convenience sampling.

This study consisted of two distinct samples. One sample of participants included expert clinicians with at least two years of experience in occupational therapy (n=5) who provided data to perform content validity. The second sample consisted of older adults (n=40) who assisted in pilot testing the measure. This sample came from a community-based program for older adults. Table 1 describes each phase's inclusion and exclusion criteria and related participant samples.

The Satisfaction Scale of Leisure Activities / Recreation of the Elderly (SSLARE) was designed by the primary author (KF) based on a literature review and analysis of other scales that evaluated some aspects of leisure or recreation: The GENCAT *Quality of Life Scale Form* [9] and the *Occupational Performance History Interview* (OPHI II) [10]. Likewise, an adapted version of the *Victoria Longitudinal Study* (VLS) *Activity Questionnaire* [13] was considered; however, it measures other constructs such as physical and social activities and leisure and the importance of evaluating satisfaction in them. Because no measure specifically addressed leisure, we proposed the design of an instrument to exclusively assess the level of satisfaction in leisure/recreation activities since there is no specific tool that assesses these items and their relation to health.

The "*Scale of Satisfaction of Leisure Activities / Recreation in the Elderly (SSLARE)*" (Escala de Satisfacción en Actividades de Ocio/Recreación del Adulto Mayor) aims to describe the level of engagement in a variety of leisure activities and to determine the level of satisfaction of older adults with respect to their leisure/recreation activities. In addition to survey items about the activities in which older adults participate and the level of satisfaction, the measure also contains demographic questions that provide the clinician or a researcher with context about the activity engagement of the older adult. For example, the respondent is asked to identify leisure or recreation activities in which they engage, the time spent in these activities, and their satisfaction with their level of participation. In the initial version of the tool, there were thirteen items organized into four sections that include:

- Section 1: Satisfaction with the time spent on leisure activity.
- Section 2: Perceived emotional satisfaction with the leisure activity.
- Section 3: Satisfaction with using aids/adaptations to carry out leisure activities.
- Section 4: Satisfaction with the type of leisure activity.

For the quantification of each item, a 5-point Likert scale was used with the following scale: strongly agree (5), strongly agree (4), agree (3), disagree (2), completely disagree (1).

In a first review of the measure, the primary author along with her project advisors performed the first review of the SSLARE to explore face validity with respect to the relevance, comprehensibility, and scaling of the measure. Next, content validity was explored via an expert panel consisting of clinicians who had experience working with older adults (n=5) who rated the 13 items on the measure using the "*Observation Guide for the Scale instrument of leisure/recreation satisfaction of the elderly*." (Appendix A) The expert panel reviewed the measure and scored each item based on a yes/no scale to evaluate each item in terms of clarity in writing, internal consistency, bias, writing appropriate to the study population, response-oriented to social desirability, contribution to research objectives, measurement of the construct under study and specific observations to each item (for example, consider whether it should be eliminated, modified, etc.) “Yes” responses were assigned 1 point and “No” responses were assigned zero points. Because two questions were negatively worded, these items were reverse-coded (The Item is nor appropriate since the majority of the authors rated it negative). Scores for each question regarding content validity were totaled and then

Table 2. *Expert Rater Agreement on Observation Guide for SSLRAE.*

ITEM	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	x̄	% agreement
1. I am satisfied with the amount of time that I dedicate to perform my leisure/recreation activity.	6	6	5	3	7	5.4	0.77
2. I always find a way to carry out my leisure/recreation activity without my other occupations interfering	6	5	5	3	7	5.2	0.74*
3. It is always pleasant for me to perform my leisure/recreation activity.	6	5	5	5	6	5.4	0.77
4. I always have encouragement to engage in my leisure/ recreation activity	6	5	5	5	7	5.6	0.80
5. I prefer to perform my leisure/ recreation activity by myself.	5	6	5	5	6	5.4	0.77
6. I prefer to perform my leisure/ recreation activity with other people.	6	6	5	5	7	5.8	0.83
7. I perform my leisure/ recreation activity even when my mood is not the best.	6	6	5	5	7	5.8	0.83
8. I consider my leisure/ recreation activity in helping me to feel better emotionally.	6	6	5	5	7	5.8	0.83
9. I am satisfied with the changes (complexity, time, intensity, etc.) that I make in my leisure / recreation activity, so I don't lose interest.	6	6	5	2	7	5.2	0.74*
10. I have adapted my leisure/ recreation activity to be able to carry them out.	6	6	5	2	7	5.2	0.74*
11. I use materials that I consider suitable for carrying out my leisure/recreation activity.	6	6	5	5	7	5.8	0.83
12. I make needed adjustments to leisure/recreation activities when they are difficult for me to carry out.	6	6	5	5	7	5.8	0.83
13. I perform my leisure/ recreation activity within my economic means.	6	6	5	5	7	5.8	0.83

evaluated for each question item in terms of percent agreement between raters.

Table 2 provides the total points for each rater for each question on the measure, along with the percent agreement for each item. Using a benchmark of .75 as an acceptable concordance coefficient [14], three items did not meet this threshold and were thus removed from the measure. The overall concordance agreement for the 10-item measure was .80, an acceptable agreement level between raters.

Once the recommended revisions were made, the SSLRAE was administered individually in the homes of 40 older adults. All participants signed a consent form before completing the questionnaire. Results obtained from the sample

were input into Microsoft Excel to analyze survey results.

Results

Validation by experts

In the first section, according to observations made by expert review, the definitions corresponding to leisure/recreation were added, as well as the specification that a professional in the rehabilitation area should administer the instrument. Lastly, expert reviewers made the comment that the measure is designed for older adults without cognitive impairment.

Based on the recommendation of the research advisors, the first section of the SSLRAE was revised by adding three relevant items: 1) level of education, 2) with whom the elderly live, and 3) reasons why they do not carry out leisure/recreation activities, if applicable. A table was also added in which participants were asked to specify the type of leisure/recreation activity they performed, and the amount of time spent in each activity, which was categorized as *sedentary activities, hobbies/crafts, physical activities, social activities, spiritual activities*, and "another'' category.

Several items' wording was revised based on expert feedback about the clarity of question statements. Once the instrument was modified, a second review was carried out by the experts and according to the data obtained through the concordance analysis, 10 of the items obtained a sufficient content validity score to remain in the questionnaire. Because three items (2,9, 10) did not meet the .75 concordance agreement, they were separated from the full measure but temporarily retained as an addendum to the questionnaire because it was thought that they might still have a contribution to overall satisfaction. Yet these items were separately analyzed. These three items include:

- "I always find a way to do my leisure/recreation activity without my other occupations interfering."
- "I am satisfied with the changes (complexity, time, intensity, etc.) that I do in my leisure/recreation activity so as not to lose interest".
- "I have had to adapt my leisure/recreation activity to be able to do it."

Because older adults may participate in more than one leisure/recreation activity, it was necessary to include a space on the measure to rate the satisfaction of each activity in which older adults engage. Respondents were asked to rate each activity in which they engaged, using the 10 questions that rated satisfaction; therefore, the results of the survey considered the older adult's satisfaction scores for multiple activities based on an individual item rating scale of totally agree (5), strongly agree (4), agree (3), disagree (2), completely disagree (1). The final weighting of the revised 10-item scale was as follows:

- 41 to 50 points = High level of satisfaction.
- 31 to 40 points = Good level of satisfaction.
- 21 to 30 points = Regular level of satisfaction.
- 11 to 20 points = Low level of satisfaction.
- 10 points = No level of satisfaction.

Pilot testing the SSLRAE

28 females and 12 males participated in the study. Participants ranged in age from 65-86, with a mean age of 74.6 (SD=6.33). Because it was thought that education might be associated with participation in leisure, participants were asked about their highest level of education. 21 participants (52.5%) had a primary/elementary school education, 13 (32.5%) had a technical school education, 5 participants had a high school education (12.5%), and 1 participant (2.5%) had a college degree. An ANOVA was performed exploring potential differences between education levels and time spent in activities, which was not statistically significant (df=3, F=.60, p=.62).

In terms of time spent in activities, participants were asked to record the number of days per

Table 3. *Summary Statistics for the SSLRAE*

Questionnaire Items	*M*	*SD*	*n*	Min	Max	Mode	Median
1. I am satisfied with the amount of time I spend doing my leisure/ recreation activity	4.40	0.78	141	2.00	5.00	5.00	5.00
2. It is always pleasant for me to carry out my leisure/ recreation activity	4.41	0.84	141	3.00	5.00	5.00	5.00
3. I always have the courage to carry out my leisure/ recreation activity	4.11	1.07	141	1.00	5.00	5.00	5.00
4. I prefer to do my leisure/ recreation activity by myself	3.79	1.30	141	1.00	5.00	5.00	4.00
5. I prefer to do my leisure/ recreation activity with other people	3.25	1.34	141	1.00	5.00	3.00	3.00
6. I carry out my leisure/ recreation activity even if my mood not the best	3.23	1.41	141	1.00	5.00	5.00	3.00
7. I consider that my leisure/ recreation activity has helped me feel better emotionally	4.57	0.74	141	3.00	5.00	5.00	5.00
8. I use the materials that I consider appropriate to carry out my leisure/ recreation activity	4.40	0.93	141	2.00	5.00	5.00	5.00
9. I make the necessary adjustments to perform my leisure/ recreation activity when it is difficult	3.66	1.18	141	1.00	5.00	5.00	4.00
10. I carry out my leisure/ recreation activity according to my economic possibilities (means)	4.41	0.95	141	1.00	5.00	5.00	5.00

week that they spent in each category of activities as well as being asked to estimate the amount of overall time spent engaging in leisure activities. Participants ranged in daily frequency from 2 to 7 days per week, with the mean days performing leisure activities being 6.83 (*SD* .84). Participants were also asked to estimate the amount of time per week spent engaging in leisure activities. The time spent in leisure activities ranged from 1 to 16.3 hours per week ($\bar{x}$= 8.36; *SD* 2.9 hrs.). To explore the relationship between age and time, two correlation tests were performed: 1) Age and days per week engaged in leisure (r=.25; p=.122) and 2) Age and time spent engaged in leisure (r=.34; p=.069)

Descriptive Data about the SSLRAE

Once participants recorded the activities in which they regularly engaged, they were asked to rate their satisfaction with each activity on a scale of 1 (dissatisfied) to 5 (totally satisfied). Table 3 provides summary statistics for overall satisfaction ratings on the SSLRAE. Note that the number of responses is 141 because the participants usedthe SSLRAE satisfaction scale to assess each activity they listed. For example, if a participant listed that they regularly engage in four leisure activities, they answered the 10-question survey once for each activity (or four times total). In this sample, satisfaction ratings were high, with no mean score of any item being below a 3 (Agree).

Because it was uncertain whether the three items that were removed from the measure (based on the expert content validity analysis) were appropriately removed, participants were asked these three questions, but they were not added into the total score for the SSLRAE. Summary statistics for these three items were: 1) I always find a way to carry out my leisure recreation activity without my other occupations interfering ($\bar{x}$= 4.01, SD 1.05), 2) I am satisfied

with the changes (e.g., complexity, time, intensity etc.…) that I make in my leisure/ recreation activity so as not to lose interest ($\bar{x}$= 3.34, SD 1.28), and 3) I have had to adapt my leisure/ recreation activity to be able to do it ($\bar{x}$= 3.33, SD 1.21). The summary statistics for these three questions indicate high satisfaction. However, two of the three questions have a mode and a median of 3, indicating that the scores may be slightly lower than the ten questions that were retained on the measure, perhaps indicating that the questions were appropriately removed.

To explore the internal consistency of the survey items about satisfaction, Cronbach's Alpha (α) Coefficient was calculated for the 10-item survey and then for the 13 items version of the SSLRAE. For the 10-item version of the tool, the α was .75 (lower=.69; upper=.80) and for the 13-item version of the SLLRAE, the α was .71 (lower=.65; upper= .77) perhaps indicating that the questions were appropriately removed (Table 2).

Discussion

Acknowledgement of the relevance of engagement in leisure is important in understanding [an individual's] meaningful occupations [15]. The SSLRAE is a tool that might assist professionals in the assessment of leisure/recreation engagement in older adults. Jopp & Hertzog [13] contend that activity measures have clinical utility by guiding interventions and monitoring progress in older adults who are recovering from illness or disability.

The content validity of the tool was adequate per the group of clinician experts. This tool helps the clinician identify client activity patterns and satisfaction associated with leisure/recreation activities. Older adults in this study are satisfied with the time they dedicate to their leisure activities, the use of aids and adaptations, and the type of activity they carry out, which is evidenced by 90.7% of the 141 activities evaluated with a high level of satisfaction ratings. Overall, the older adult participants engaged in a variety of types of activities. However, the physical activity was a bit lower than expected or than the recommended amount of weekly physical activity (e.g., 150-300 minutes/week) [5]. Paggi et.al [3], found that physical health was related to leisure activities and leisure activities were related to well-being. Further, they found that leisure activities are a partial mediator of the relationship between physical health and well-being, indicating an inter-relationship between leisure, physical activity and well-being.

In this study all participants reported engaging in watching television, which is considered a passive or sedentary leisure activity. Ultimately, the goal of creating the SSLRAE is to inform intervention that facilitates engagement in a variety of leisure-related activities. Copeland et al. [16], note that to evaluate the effectiveness of interventions, self-report tools might help identify specific sedentary behaviors that are more passive versus those that are more active in order to understand all of the potential benefits including social, cognitive, or physical benefits of leisure activities.

Although they did not impact the score obtained on the entire scale, the three questions (2,9,10) that did not meet the criteria for inclusion provides information regarding the ability of the elderly to find opportunities to carry out leisure/recreation activities in parallel with other activities of their daily life and that they are also able to make modifications in leisure/recreation activities so as not to lose interest in them. It is important to note that all of the participants engaged in some form of leisure/recreation activities. This finding leads us to strengthen the idea of the importance of these experiences in the life of the elderly along with the benefits afforded to their health status in general. For instance, Verghese et al. [17] found that leisure activities such as reading, board games, musical instruments, and dancing were found to reduce the risk of dementia.

Analyzing the results obtained and comparing them with other studies related to leisure/recreation in the elderly, we observe that the most frequent activities for this age group in this community were watching television and reading. This finding is consistent with Cho et al.

[18] found where the majority of 460 older adult participants in China spent most of their time in passive leisure activities such as reading, talking on the telephone and watching television/listening to the radio which indicates that there are some cross-cultural commonalities in older adults choosing more passive leisure pursuits.

Difficulty in comparing measures internationally or across populations lies in the fact that many questionnaires label different aspects of leisure and recreation. This study used existing literature to classify activities as sedentary, hobbies/crafts, physical, social, spiritual/ religious and "other". Classification of leisure activities may be challenging because there may be overlap between categories. For example, hobbies and crafts might be sedentary or activities that we classified as "other" such as games, might also be sedentary or social. In their investigation about leisure occupations in older adults, Ball et al., [19] classified activities like our measure by identifying categories such as: active leisure; passive leisure; social leisure; hobbies and "other '' leisure occupations. Similarly, Park and Park [20] classified leisure activities as physical, emotional, or social. Not all assessments specifically name religious or spiritual activities as part of the leisure context. The SSLRAE was developed in a cultural context that values religious participation, thus it was not a surprise that these activities were frequently cited and therefore are among the categories of leisure activities on the SSLRAE.

Marr and colleagues [7] point out that many studies use different domains or constructs for measurement and authors don't always give a rationale for naming the constructs. While modifying the Victoria Longitudinal Study-Activity Lifestyle Questionnaire (VLS-ALQ) with a UK sample, Marr and colleagues [7] noted that there are a wide variety of domains being measured on different leisure questionnaires. They found six activity domains: manual, intellectual, games, religious, exercise, and social. Future studies might consider the leisure/recreation activity domain names within their populations for constructs and when performing concurrent validity, comparing domains on the SSLRAE to similar names of constructs on other measures.

Future studies might include further investigation of the intrinsic motivation of older adults for engagement in leisure since it was found as one of the best-evaluated items for everything related to emotional satisfaction in relation to the realization of leisure/recreation activities (i.e., items 2 and 7 in the final Scale). Additionally, participants indicated they perform their leisure/recreation activities to not interfere with their other occupations. This indicates a high level of intrinsic motivation for the performance of leisure occupations, which could reaffirm what was found by Rivero [21] where he points out that the motivation to participate in activities are, in principle, intrinsically linked to needs for self-realization, esteem and connection with others.

Participants in this study all lived in their own homes versus an institution. This coincides with the study by Marquesini [22], where 48 older adults participated; half of them reside in their respective homes, and the other half live in a geriatric institution. A scale used was based on statements related to the acceptance of various changes associated with aging, with results indicating that people who remain in their homes have a greater capacity for adaptation and self-esteem, unlike those who are institutionalized.

Although these study participants were healthy community-dwelling older adults, our goal as clinicians is to use information from assessment/evaluation to inform interventions. Engels et al. [23], conducted a systematic review studying leisure in older adults with cancer. They found that people with co-morbidities and low activity levels before having cancer were at risk for occupational disruptions. They also found that more of the studies in people with cancer focus on physical activity rather than other leisure pursuits and they suggest that since cancer is a chronic condition occupational therapists should perform occupation-centered evaluation and intervention to elicit effectiveness in outcomes.

In a systematic review regarding leisure in older adults with low vision, Berger and colleagues [24], found that older adults with vision impairments had decreased social interaction as well as difficulty engaging in leisure activities. They found that interventions for enhancing leisure function consisted of a) problem solving with clients, b) a combination of different services, c) skills training, and d) environmental adaptations all of which had some influence on leisure engagement. The SSLRAE measures satisfaction which helps clinicians to problem solve with their clients to adapt, to engage in skills training, or to find new leisure activities that influence well-being. In other words, using the SSLRAE facilitates addressing leisure and recreation occupations in older adults from the perspective that "*occupations include things people need to, want to and are expected to do*", WFOT [23].

Study limitations

Regarding the limitations of the study, we found some difficulties associated with the confinement situation and restricted mobility due to the COVID-19 pandemic, generating difficulties for sampling in diverse contexts since it could only be applied within the urban population. Therefore, this does not allow generalizing the results of this pilot to older adults living in rural communities. Lastly, although Cronbach's alpha gave us a good level of reliability for the scale, using a much larger sample would allow obtaining greater specificity when evaluating satisfaction regarding leisure/recreation in the elderly.

Likewise, an important gap was identified in terms of evidence for leisure and recreation in the elderly, its importance, impact, and variability associated with external contextual factors, internal factors, and personal, among other factors.

Conclusion

The SSLRAE highlights The importance for the older adult elderly individual to be able to maintain or even increase their participation in and diversification in leisure/recreation activities might that may benefits impact on their physical and emotional health [21], and ultimately improves, translating into a significant impact on their quality of life. This is understood as "a wide-ranging concept that is crossed in a complex way by the physical health of the person, their physiological state, their level of independence, their social relationships, and the relationship they have with their environment" [5].

The SSLRAE is a newly developed questionnaire that was subjected to validation and reliability processes, resulting in a reliable instrument.

Engagement in leisure/recreation activities by older adults is of great importance for their health at this stage of life since it helps improve their emotional state, optimizes their motor, cognitive, and social skills, and keeps them active among many other benefits [25].

The SSLRAE is a questionnaire-type instrument that can be administered by a rehabilitative health professional. It was constructed to identify preferred leisure/recreation activities of older adults and their level of satisfaction with these activities. It complements the process of taking an individual's clinical history, facilitates the design of meaningful interventions for their recovery while considering the perspective of the client to take preventive measures regarding doing their leisure activities. In conclusion, the SSLRAE is an instrument with global application as it addresses an essential component of living - leisure and recreation for older adults. It is hoped that it can be applied in clinical or community based research to provide the evidence for contribute to the literature on the health benefits of engaging in preferred leisure and recreation activities for older adults.

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