2024, Retos, 56, 280-288

Perfil sociodemográfico de los adultos mayores físicamente activos según el tipo de actividades deportivas practicado: gimnasia, actividades acuáticas, yoga, pilates y danza.

Sociodemographic profile of physically active older adults according to the type of physical activities practiced: Gymnastic Exercises, Aquatic Activities, Yoga, Pilates and Dance

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Resumen. Introducción. El ejercicio físico mejora la salud psicofísica de los adultos mayores. Sin embargo, existen variables sociodemográficas que favorecen o dificultan la práctica deportiva que han sido escasamente investigadas (educación, ingresos, género y estado civil), ni se ha prestado atención a estas variables en relación con los diferentes deportes practicados (gimnasia, actividades acuáticas, yoga, pilates y danza). Objetivo. Por ello, el objetivo de este estudio ha sido conocer el perfil sociodemográfico de los adultos mayores que realizan algún deporte. Procedimiento. Se utilizó la escala de calidad de vida CUBRECAVI y un cuestionario sociodemográfico en una muestra de 358 personas mayores de 60 años (M = 69,66, DT = 4,74). Resultados. Los resultados han mostrado que entre los mayores que hacen gimnasia hay más participantes que tienen menor cualificación académica ($p < 0,001$), bajos ingresos ($p < 0,001$); y mujeres ($p = 0,003$); y que los solteros y divorciados realizan actividades de danza en mayor proporción que otras actividades ($p = 0,004$). Conclusiones. En conclusión, la actividad deportiva practicada por los adultos mayores está relacionada con el nivel de educación que tienen, los ingresos que perciben, el género y su estado civil.
Palabras clave: Personas mayores; envejecimiento; deporte, actividad física; diferencias socioeconómicas; educación; ingresos; género

Abstract. Introduction: Physical exercise enhances the psychophysical well-being of older adults. However, sociodemographic variables that may either facilitate or impede the engagement in physical activities, such as education, income, gender, and marital status, have been insufficiently explored. Furthermore, limited attention has been given to these variables concerning specific physical activities, including gymnastics, aquatic activities, yoga, pilates, and dance. Objective: The aim of this study is to delineate the sociodemographic profile of physically active older adults based on the specific type of physical activity they participate in. Procedure: A sample of 358 individuals aged over 60 years (M = 69.66, SD = 4.74) participated in the study, utilizing the Quality of Life Scale and a sociodemographic questionnaire, specifically the CUBRECAVI. Results: The findings indicate that older adults engaged in gymnastics are more likely to possess lower academic qualifications ($p < .001$), lower income ($p < .001$), and be women ($p = .003$). Additionally, single and divorced individuals participate in dance activities at a higher rate compared to other activities ($p = .004$). Conclusion: In summary, the choice of physical activity among older adults is associated with their educational level, income, gender, and marital status.
Keywords: older adults; aging; physical activity; sport; socioeconomic differences; education; income; gender

Fecha recepción: 09-10-23. Fecha de aceptación: 10-04-24
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Introduction

By the year 2050, an anticipated 20% of the global population will be aged 65 or older, a consequence of the ongoing global trend of population aging (Dogra et al., 2022). This demographic shift is accompanied by an escalation in chronic non-communicable diseases, underscoring the imperative for a more comprehensive and dedicated socio-healthcare framework (Kushkestani et al., 2022).

The promotion of physical activity can help mitigate the risk of dementia and age-related decline in older adults, enhancing their quality of life (Hemmeter & Ngamsri, 2022). Physical activity offers numerous benefits, including reduced mortality, lower incidences of hypertension, cancer, and diabetes, improved cognitive health and sleep, and enhanced bone and functional health (Bull et al., 2020). Authors highlight that physical exercise can improve general functional status, reduce falls, and have positive cardiovascular effects (Kanach et al., 2018; Humira et al., 2020; López & Parra-Rizo, 2020). Socio-contextual factors like quality of life, education, and income levels facilitate physical activity, while being female, having lower functional capacity, or limited engagement in leisure activities can act as barriers (Zapata-Lamana et al., 2021; Parra-Rizo et al., 2022). Fitness training programs tailored for older individuals are gaining popularity in Europe and worldwide (Batrakoulis et al., 2019).

Evidence from a longitudinal study involving 21,172 older adults over 14 years indicates a potential increase of 2 to 4 years in life expectancy associated with physical activity (Boylan et al., 2022). Furthermore, the quality of life for physically active older individuals is intricately linked to health, social relationships, functional autonomy, and engagement in activities (Parra-Rizo et al., 2017). Specific research, through meta-analysis, underscores that participating in leisure activities and obtaining 7-8 hours of sleep daily

is correlated with greater longevity in physically active older individuals (Fernández-Ballesteros et al., 2022).

Economic factors, such as low income, are revealed to adversely impact the health and quality of life of older individuals (Rizal et al., 2022). In the same way, in a study carried out on a sample of 9,390 older adults, their health status was self-assessed, as well as healthy aging, leisure, and the development of frailty (Zhou et al., 2022). Socioeconomic status emerges as a determinant affecting social participation, health, and disability, although income alone does not necessarily correlate with life satisfaction compared to health and self-sufficiency assessments (Zapata-Lamana et al., 2022). Notably, individuals with higher educational levels among the older population exhibit reduced pain, lower incidence of serious diseases, and fewer cardiovascular problems (Liu & Wang, 2022). Likewise, other studies (Migeot et al., 2022; Wong & Yang, 2022) also investigated the relationship between socioeconomic status and cognitive and executive functioning in older adults and its influence on psychological and biological aspects. Some authors in a research carried out with people over 65 years of age, showed differences in their health status depending on their educational level and income (Zang et al., 2022). Other authors found in a sample of 1,282 women the importance of socioeconomic (educational) inequalities in women's walking, making it necessary to implement strategies to reduce the differences that can influence the act of walking in women (Ball et al., 2007).

The scientific literature emphasizes socio-environmental factors like the presence of trails, proximity to the coast, neighborhood characteristics, and open public spaces as key elements that promote physical activity. A study with ten women aged 72 to 97 identified health, physical environment, and social environment as important factors influencing physical activity. Accessible outdoor areas, facilities, and a supportive neighborhood were facilitators, while poor health, cold weather, and lack of a culture of physical activity were barriers (Bjornsdottir et al., 2012). Another study with 689 women over 60 years old, who had high education and financial status, showed they exhibited healthier behaviours (Kuska et al., 2022).

Likewise, in a study conducted with 384 people over 60 years of age, it was found that having a high level of education was related to a greater practice of physical activity (Arazi et al., 2022). Similarly, in a study carried out with a sample of 3,034 older adults (1,614 women and 1,420 men) it was found that women with low socioeconomic status obtained worse results in social, physical, and mental health compared to men (SuJung, 2022).

Sport can be defined as an activity that follows specific rules, whether there is competition involved. It typically focuses on the development of skills, dexterity, and physical strength. In this regard, it should be noted that taking considering these variables and the sports practiced would help to better guide policies aimed at improving the health and quality of life of the older adults, since the evidence found confirms that those who practice gymnastics show improvements in waist circumference index (WCI), limb strength, and depressive symptoms (Kim et al., 2021), as well as a reduced risk of falling (Uusi-Rasi et al., 2020). In this regard, the gymnastics practiced by the older adults consists of a series of gentle, low-intensity physical activities that are aimed to improve strength with aerobic exercises, stability, and balance, along with low-impact activities for strengthen muscles and joints.

On the other hand, the evidence found involving the activity of dancing also shows a decrease in the risk of falls; increased flexibility and strength; higher quality of life in general in healthy older people (Fernández-Argüelles et al., 2015); cardiac improvements (Varas-Díaz et al., 2020); reduced feeling of loneliness; increased well-being and positive emotional impact (Bungay & Hughes, 2021); and a better cognitive level (Tommasini et al., 2021a). Furthermore, in a study carried out with a sample of 28 people aged 65 to 80 years, it showed greater maintenance of cognitive and physical abilities, an improvement in quality of life and preservation of normal cognitive reserve (Tommasini et al., 2021b).

Regarding aquatic activities, the scientific literature shows that they reduce pain in older people with arthritis (Azizi et al., 2020); increase their perception of quality of life; they improve their body composition, functionality, and cognitive level (Barbosa et al., 2019; Farinha et al., 2021) improve their tension-anxiety, depression and confusion, and anger-hostility (Lee et al., 2020); and decrease their anxiety, sleep, mental health and functional autonomy (Silva et al., 2021).

Likewise, studies referring to the benefits of yoga show improvements in a group of 60-70 older people in muscle strength, balance, mobility, and flexibility of the lower part of their body (Shin et al., 2021); reductions in anger and anxiety, and an increase in their well-being, self-efficacy, and executive function (Martens, 2022). Similarly, an improvement in sleep has been observed in 96 participants aged between 60 and 75 years (Shree et al., 2021).

Concerning the benefits that the practice of pilates has on the older adults, different investigations have shown that it improves health, especially with regard to postural control in a group of 46 older adults (Patti et al., 2021); balance and risk of falls in women older than 60 years (Dlugosz-Bos et al,. 2021); strength and flexibility (Fernández-Rodríguez et al., 2021); physical functioning and quality of life in women with osteoporosis (McLaughlin et al., 2022); mental and cognitive function, anxiety, depression, and increased VO2 (maximum volume of oxygen), decreased BMI (body mass index), and decreased daytime salivary cortisol in 27 healthy older women between the ages of 60 and 65 years (Farzane & Koushkiem, 2022); and depression in a group of 75 older women (Soori et al., 2021).

However, and despite the previous evidence described regarding the psychophysiological benefits that occur with the practice of each sport modality, there is little research that examines socio-environmental factors and activities carried out outdoors (Wang et al., 2022). Furthermore,

studies addressing this question show inconsistent results (Kuska et al., 2022); the works that face the different sports modalities and the benefits they bring to the older adults who practice them, as this document does, are non-existent.

Physical exercise has been shown to improve the psychophysical health of older adults. However, there is a lack of research on sociodemographic variables that may influence sports participation in older individuals, especially in relation to the specific types of sports practiced. Understanding these variables could help in developing targeted policies to promote sports participation among older adults based on their individual profiles. This publication aims to explore these sociodemographic variables to create a profile of physically active older individuals based on the type of physical exercise they engage in.

The primary objective of this research is to examine whether the sociodemographic profile of participants differs based on the type of sport practiced. Specifically, we aim to investigate the following aspects:

Assess differences in educational levels among older adults based on the type of sport practiced.

Examine variations in income levels among older adults in relation to the type of sport practiced.

Investigate gender disparities among older adults based on the type of sport practiced.

Explore differences in marital status among older adults based on the type of sport practiced.

Method

Sample

The sampling is non-probabilistic by convenience in Alicante. The observational cross-sectional study. The sample consisted of 358 older adults people from the province of Alicante. The following inclusion criteria were set: a) people over 60 years of age; b) Older adults affiliated with social and/or sports centers engaging in indoor or outdoor sports activities; c) older individuals capable of reading the battery of questionnaires; d) Active participants with a minimum of one year of experience in the physical practice of the center. The exclusion criteria set were: a) Sedentary individuals; b) Individuals facing difficulty reading the battery of questionnaires due to illness or reading disability; c) Individuals indicating non-participation in physical activities or sports.

These criteria were employed to ensure the inclusion of actively engaged older adults with diverse physical activity experiences while excluding sedentary individuals or those facing challenges in participating due to health or reading-related limitations.

Instruments

Sociodemographic Data Questionnaire

An ad hoc questionnaire was created specifically for this study to gather sociodemographic data. This comprehensive tool covers gender, age, marital status, habits, health status, cohabitation situation, employment status, and details of the sports practiced by the participants.

*Brief Quality of Life Questionnaire, CUBRECAVI (*Fernández-Ballesteros & Zamarrón, *2007)*

The CUBRECAVI quality of life questionnaire was used. Based on the multidimensional concept of quality of life and health proposed by the WHO, this self-administered questionnaire evaluates the most relevant components of quality of life in older people. It is made up of 21 subscales, among which those used for this publication stand out, which are level of studies and income. This questionnaire has a level of internal consistency on the scales (Cronbach's alpha) that ranges between 0.70 and 0.92. It takes approximately 20 min to complete the questionnaire. It is a highly recommended questionnaire to assess the quality of life (Fernández-Ballesteros & Zamarrón, 2007) and has recently been used in older people (Rondón-García & Ramírez-Navarro, 2018).

Procedure

The participants have been selected in two settings in Alicante: in sports and social centers and in outdoor areas where sports are usually practiced.

On the one hand, contact was established with 38 centers, of which 18 agreed to collaborate. Those interested in participating were given a copy of the informed consent and another of the questionnaire that they filled out individually after practicing physical activity.

On the other hand, in outdoor areas where the population goes to practice sports, contact was established with people who met the requirements defined for the study, and the research and its objectives were explained to them. Those who agreed to participate were given an envelope with the questionnaire and the informed consent that they had to return completed at a later appointment set at that time.

In open-air settings where the populace engages in sports, contact was established with individuals meeting the defined study criteria. Subsequently, the research objectives were explicated, and those who consented to participate were furnished with an envelope containing the questionnaire and the requisite informed consent. Participants were instructed to return the completed documents at a later appointment scheduled during that interaction.

The participants collaborated voluntarily and anonymously without any identification, just a response to the battery of questionnaires of interest. The participants willingly and anonymously contributed, providing responses solely to the relevant questionnaire battery. Data collection occurred between April 1 and July 31, 2015. The confidentiality of the data has been ensured in compliance with the General Data Protection Regulations, as well as Organic Law 3/2018, dated December 5, concerning the Protection of Personal Data and the Guarantee of Digital

Rights. Additionally, this study received approval from the Ethics Committee of XXXX with registration number 200115191342.

Analysis of data

A descriptive frequency analysis of study variables (educational level, income, gender, and marital status) has been conducted within the general sample and disaggregated based on the participants' specific sports activities. Subsequently, to explore whether older individuals exhibit differences in these variables based on their chosen sports, the chi-square test was employed (depending on the type of question constituting the variable, the sample size may slightly vary for statistical analyses). Effect size was estimated using the Phi coefficient and Cramer's V (based on the contingency table sizes). The significance level was set at <.05. Data analyses were performed using the statistical package SPSS, version 23.0 (IBM Corp., Armonk, NY, USA for Windows).

Results

Sixty four percent of the participants were females, while 36% were males. The participants' ages ranged from 61 to 93 years, with a mean age of 69.66 years (SD = 4.74). Regarding marital status, 67.6% were in a marital union, 16.8% were widowed, 9.1% were single, and 6.5% were divorced. In terms of health-related habits, 91.8% were non-smokers, and 51.9% abstained from alcohol consumption. Regarding their health status, 72.6% reported no physical ailments, and 88% had no psychological ailments. The physical activities engaged in by participants were as follows: 54.7% involved in physical exercise, 16.2% in yoga/pilates, 15.1% in dance activities, and 14% in water activities. The frequencies of study variables are presented in Table 1:

Table 1.
Frequencies of study variables

	n	%
Educational Level		
Less tan primary education	131	36.6
Primary Education	90	25.1
Vocational Training	26	7.3
Elementary and higher secondary Education	36	10.1
Medium and higher degree studies	75	20.9
Income		
Up to 600 €	68	19.0
Between 601 and 1200 €	133	37.2
More than 1200 €	152	42.5
Not specified/not captured(Ns/Nc)	5	1.3
Gender		
Male	129	36.0
Female	229	64.0
Marital Status		
Single/Divorced	53	14.8
Married	229	64.0
Widowed	57	15.9
Not specified/not captured(Ns/Nc)	19	5.3
Sport		
Physical Exercise	196	54.7
Dance	54	15.1
Acuatic Activities	50	14.0
Yoga/Pilates	58	16.2

Note* n= number of participants; %=percentage

Studies

The examination of participants' educational levels (refer to Table 2) has unveiled statistically significant variations in the activities they pursue based on their academic backgrounds ($\chi2(12, N = 358) = 46.101$; $p < .001$), with a slight association observed among the variables ($V_{Cramer} = .207$).

Upon scrutinizing specific activities revealing dissimilarities, the findings indicate noteworthy differences between those engaged in water sports and other physical activities such as dance and yoga/pilates ($\chi2(4, N = 358) = 27.753$; $p < .001$; $V_{Cramer} = .278$). These distinctions are particularly evident among individuals with less than primary education, where 44.3% are involved in water sports, in contrast to 19.6% participating in dance and yoga/pilates, showcasing significant differences from other educational levels ($\chi2(1, N = 358) = 20.181$; $p < .001$; Phi = .237).

Table 2.
Frequencies of the level of studies according to the sport practiced.

	Less than primary studies		Primary studies		Vocational training		Elementary and higher bachelor's degree		Intermediate and higher degree studies	
	n	%	n	%	n	%	n	%	n	%
Gymnastic	87	44.4	50	25.5	13	6.6	11	5.6	35	17.9
Dance	12	22.2	11	20.4	3	5.6	5	9.2	23	42.6
Water activities	22	44.0	13	26.0	3	6.0	9	18.0	3	6.0
Yoga/ Pilates	10	17.2	16	27.6	7	12.1	11	19.0	14	24.1

Note*= n= number of participants; %= percentage.

Income

In examining the compensation levels of the participants (see Table 3), the analyses reveal statistically significant disparities in the physical activities they engage in based on their income ($\chi2(6, N = 353) = 25.207$; $p < .001$), demonstrating a modest association between the variables ($V_{Cramer} = .189$). Exploring the specific physical activities where distinctions in income brackets are apparent, it is determined that variations exist between individuals involved in gymnastics and water sports versus those participating in dance and yoga/pilates ($\chi2(2, N = 353) = 21.709$; $p < .001$; $V_{Cramer} = .248$). Notably, these differences are observed concerning participants with an income exceeding €1,200, where 34.9% engage in gymnastics and aquatic

activities, contrasting with 60.7% involved in dance and yoga/pilates. This disparity is statistically significant when compared to those with an income less than €1,200 ($\chi2(1, N = 353) = 20.855$; $p < .001$; $Phi = -.243$).

Table 3.
Frequencies of income brackets according to the sport practised

	Up to €600		Between €601 and €1,200		More than €1,200	
	n	%	n	%	n	%
Gymnastic	46	24.1	81	42.4	64	33.5
Dance	5	9.3	12	22.2	37	68.5
Water activities	10	20.0	20	40.0	20	40.0
Yoga/Pilates	7	12.1	20	34.5	31	53.4

Note*= n= number of participants; %= percentage

Gender

Upon considering the gender of the participants (refer to Table 4), the data analysis reveals statistically significant distinctions in the sports practiced among older individuals in the study based on their gender ($\chi2(3, N = 358) = 9.592$; $p = .022$), indicating a modest association between the variables ($V_{Cramer} = .164$).

Investigating the specific physical activities where gender differences are apparent, it is observed that variations exist between individuals engaged in gymnastics and those participating in other activities ($\chi2(1, N = 358) = 9.082$; $p = .003$; $Phi = - .159$). Specifically, men constitute 29.1% compared to 44.4%, while women comprise 70.9% compared to 55.6%, showcasing statistically significant distinctions.

Table 4.
Frequencies of gender according to the sport practiced.

	Man		Woman	
	n	%	n	%
Gymnastic	57	29.1	139	70.9
Dance	24	44.4	30	55.6
Water activities	24	48.0	26	52.0
Yoga/Pilates	24	41.4	34	58.6

Note*= n= number of participants; %= percentage

Marital status

In addressing the marital status of the participants, individuals classified as singles ($n = 31$) and divorced ($n = 22$) have been consolidated into a unified category, resulting in the recoding of the variable into three distinct categories: single/divorced, married, and widowed (refer to Table 5). In this context, statistically significant disparities emerged in the sports activities practiced by older adults based on their marital status ($\chi2(6, N = 339) = 19.103$; $p = .004$), indicating a modest association between the variables ($V_{Cramer} = .168$).

Exploring the specific physical activities where marital status differences are apparent, it is noted that variations exist between individuals engaged in dance activities and those participating in other activities ($\chi2(2, N = 339) = 10.334$; $p = .006$; $V_{Cramer} = .175$). Notably, these differences manifest between the single/divorced group (29.2% participating in dance and 13.4% in other activities) and the remaining categories ($\chi2(1, N = 339) = 7.764$; $p = .005$; $Phi = .151$).

Table 5.
Frequencies of marital status according to the sport practiced.

	Single/Divorced		Married		Widowed	
	n	%	n	%	n	%
Gymnastic	31	16.3	123	64.7	36	19.0
Dance	14	29.2	31	64.6	3	6.2
Water activities	6	12.0	39	78.0	5	10.0
Yoga/Pilates	2	3.9	36	70.6	13	25.5

Note*= n= number of participants; %= percentage

Discussion

The aim of this study was to investigate whether the sports modality practiced by older individuals differed based on sociodemographic variables such as education, income, gender, and marital status. Our findings revealed disparities among individuals with a lower level of education, particularly in the preference for gymnastics and aquatic activities compared to dance, yoga, or pilates. Additionally, those with higher income tended to engage more in dance, yoga, or pilates, in contrast to individuals with lower income who leaned towards gymnastics and aquatic activities. Gender-wise, men exhibited a lower tendency for gymnastics and a higher inclination for aquatic activities, dance, yoga, and pilates, while women displayed a stronger preference for gymnastics, followed by yoga, pilates, dance, and lastly, aquatic activities. Interestingly, single and divorced older individuals were more inclined towards dancing activities, whereas married individuals favoured aquatic activities, yoga, and pilates, and widowed individuals expressed a greater interest in yoga and pilates.

Firstly, the study underscored distinctions in sports preferences based on education levels, with participants lacking higher education showing a preference for activities such as gymnastics or water-based exercises. Importantly, this research delved into a novel aspect not yet explored in scientific literature: examining these aspects according to the specific sport practiced. Existing research primarily centered on the correlation between higher education and perceiving sports as a health source (Faß & Schlesinger, 2021); higher education, financial stability, and better health-related behaviours (Bjornsdottir et al., 2012); or higher education correlating with increased physical activity (Kuska et al., 2022). However, these studies did not address these topics concerning the specific sport modality.

Secondly, the findings also indicated that individuals with higher income levels were more inclined to practice dance, yoga, or pilates, in contrast to those who exercised in gymnastics and aquatic activities, with lower income. This observation may have been partially attributed to the free nature of these latter activities (Stiggelbout et al., 2008; Viladrosa et al., 2018), although the results of these studies could not be generalized given that, today, in many centers, older people had these sports offers. In this regard, some studies indicated that low income was associated with poor health status and quality of life in older people (Fernández-Ballesteros et al., 2022).

Thirdly, concerning gender differences, the results revealed a lower prevalence of gymnastics among men and a greater engagement in aquatic activities, dance, yoga, and

pilates; compared to women who practiced, to a greater degree, in the first place, gymnastics, followed by yoga, pilates, dance, and lastly, aquatic activities. General studies on this topic, not considering the specific nuances of our work, indicated a higher adherence to sports practice in those who had a high academic level and income, and in men compared to women (Parra-Rizo et al., 2017) Moreover, research involving a cohort of 689 people aged 60 and above found that women exhibited more favourable health behaviours (Bjornsdottir et al., 2012). In the present study, women obtained worse results in social, physical, and mental health. However, these differences had not been found in the scientific literature.

Fourth, the outcomes demonstrated that single and divorced older individuals tended to participate more in dancing activities, while married individuals exhibited a preference for aquatic activities, yoga, and pilates. Widowed individuals, on the other hand, showed a heightened interest in yoga and pilates. These findings underscored how personal circumstances could significantly influence the selection of a particular sports modality and the search for a social dimension in sporting activities based on marital status. Parallel studies underscored the significance of dancing as a socially relevant activity for older individuals (Varas-Díaz et al., 2020). Exploring the social nature of exercise, a study involving 7,759 individuals aged 65 to 84 revealed that exercising, whether alone or in a group, enhanced physical and mental functionality (Batrakoulis, 2022). Notably, engaging in exercise with company was associated with improved physical and mental well-being. In this respect, it was worth noting the effectiveness of certain exercises such as yoga and pilates in older adults (Batrakoulis, 2022; Seino et al., 2019).

In conclusion, our study highlighted the intricate interplay between sociodemographic factors and sports modality preferences among older individuals. By examining the nuances of education, income, gender, and marital status, we uncovered disparities in sports engagement that underscored the importance of tailored interventions and support systems. These findings not only enriched our understanding of older adults' physical activity behaviours but also provided valuable insights for policymakers, healthcare professionals, and community organizations striving to promote active aging and enhance the well-being of older populations. Moving forward, continued research in this field would be essential for developing targeted strategies that foster inclusivity and empower older adults to lead healthy, fulfilling lives.

Conclusions

In summary, the physical activities engaged in by older adults exhibit correlations with their educational attainment, financial status, gender, and marital status. Notably, those involved in gymnastics and aquatic activities tend to have less than primary education and earn less than €1,200. Within the realm of gymnastics, there is a higher prevalence among women. Meanwhile, participants in dance activities predominantly include singles and divorcees, highlighting the impact of personal circumstances on the choice of sporting modality and the quest for a communal aspect in sporting pursuits tied to marital status.

The establishment of distinct sporting profiles reveals that individuals with lower educational levels gravitate towards gymnastics and aquatic activities, as opposed to their counterparts in dance-yoga/pilates. Higher-income brackets demonstrate a proclivity for dance, yoga, or pilates, contrasting with lower-income individuals who lean towards gymnastics and aquatic activities.

Moreover, gender disparities are evident, with men exhibiting reduced engagement in gymnastics and heightened involvement in aquatic activities, dance, yoga, and pilates. In contrast, women display a higher inclination towards gymnastics, followed by yoga, pilates, dance, and, lastly, aquatic activities.

Furthermore, a divergence emerges among marital statuses, as single and divorced older individuals display heightened participation in dance activities. In contrast, married individuals exhibit a preference for aquatic activities, yoga, and pilates. Widowed older individuals manifest a greater interest in yoga and pilates. Consequently, individual circumstances exert a discernible influence on the chosen sports modality, underscored by a pursuit of a communal dimension within sporting activities.

A secondary inference arising from the initial findings underscores the imperative to scrutinize the root causes, motivations, or sociocultural factors contributing to the observed disparities in sport modality choices based on educational level and income. Addressing these inequalities within the older adult population warrants comprehensive examination. The identified differences in sports activities based on gender and marital status emphasize the potential for public authorities to tailor sports policies, catering to individual preferences and needs. This adaptation becomes especially crucial for older individuals with lower educational levels and limited income, promoting their active participation and overall well-being.

Acknowledgments

Author Contributions

Funding

No funding.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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