

OLDER ADULTS AND SPORT AND PHYSICAL ACTIVITY PROFESSIONALS IN SPAIN

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ABSTRACT

Presence of monitors in physical activities and sports practiced by adults older than 64 years of age in Spain is analyzed in this research. The objective of this study is to determine the existence of monitors in relation to the sociodemographic features of older adults, the size of municipalities, the activities practiced, and the organizations where they are performed. The methodology used included a cross-sectional survey applied to a sample of older adults in Spain. The most relevant conclusions are that the presence of monitors in physical activities and sports practiced by older adults is dominant (63.8%), hence, their importance, and that the presence of monitors is higher for women (81.3%) than for men (37.5%). In addition, it is concluded that the bigger the municipality the higher the tendency to have more instructors. Regarding the type of activity, wide diversification is obtained; finally, there is a larger presence of monitors in sports entities (87.5%) and nursing homes (79.5%).

KEY WORDS: professionals, exercise, monitor, aging, older adults, physical activity, sport.

Introduction

During the last decades, adults over 64 years have been the segment of population that has experienced the strongest growth in Western societies. This has been particularly the case in Spain, since it is one of the countries with the oldest populations in the world. A very substantial increase is expected in this segment across Europe during the following decades of this century (Martínez, Jiménez-Beatty, Graupera, and Rodríguez, 2006; Jiménez-Beatty, Graupera, Martínez, Campos and Martín, 2007).

According to the Institute for the Elderly and Social Services (*Instituto de Mayores y Servicios Sociales*) (2008), one of the main characteristics of older adults in Spain is the availability of free time, which translates into greater intensity and frequency of consumption of leisure. In this sense, Bazo (1996) states that due to economic, social and

cultural developments in recent decades, older adults in Spain now have more material, economic and social resources to enjoy free time than previous generations. It should be stressed that according to the National Institute of Statistics (*Instituto Nacional de Estadística*) (2003) the second most common daily leisure activity within the elderly is physical exercise, with an hour a day dedicated to it.

In addition, Jamet (1998) and García-Ferrando (2001) conclude that there has been a great diversification and growing popularity of sports and physical activities among increasing segments of the population. Among those segments are the elderly, who have been traditionally marginalized from modern sports, but, as indicated by Mosquera and Puig (2002), where possible (improved quality of life, special offerings, etc.) they have started to be attracted by these activities and to incorporate them in their lifestyles. However, the amount of older adults who practice physical activities or exercises is still small compared to other social groups due to a number of circumstances, obstacles or barriers.

Regarding the practice of sport and physical activity by older adults, according to the 2005 study on sport habits conducted by García-Ferrando (2006), 17% of adults between 65 and 74 years of age in Spain practice sports, and an increase can be noted over previous decades.

In a study by Martínez et al. (2007a) on adults over 64 years of age in Spain, particularly in regard to their weekly practice of sport and physical activity, 17.4% practiced some sport and/or physical activity on a weekly basis (established demand), 12.8% did not practice but expressed their desire to have at least one weekly activity but, for some barrier or circumstance, had not been able to do it (latent demand), and 69.8% did not practice and were not interested in practicing (absent demand) due to different barriers or inhibitory variables.

Most studies have identified personal characteristics such as health status and physical limitations, as well as feeling old as the most important barriers (McGuire, 1985; Searle and Iso-Ahola, 1988). These investigations must be added to others that have recognized the importance of the personal characteristics and social environments of the elderly as a potential source of barriers to the practice of physical activities (Collins, 2003). In addition, other investigations have found other barriers related to deficiencies in the offering of facilities and sport activities (lack thereof, distance, inappropriate features, inadequate class planning and operations, etc.) in order to meet demands (Searle and Jackson, 1985; Shephard, 1994; Whaley and Ebbeck, 1997).

Many of these barriers can be reduced with the proper performance of sport and physical activity professionals who run and develop such activities and thereby get more seniors to practice them. The numerous psychological, physiological and social benefits resulting from this practice largely depend on the professionals in this area. If they are not adequately prepared there is a risk that there will be problems with adverse effects on older adults practicing (health, education, etc.) instead of the various direct and indirect benefits produced (Campos, 2007; González, Martín, Jiménez-Beatty, Campos and Del Hierro, 2008).

It should be noted that sport and physical activity professionals must have the appropriate qualifications (Campos, 2005) and belong to one of the professions established in the Sports Professions Bill, proposed by the National Sports Council (*Consejo Superior de Deportes*) in 2007. Such professions include physical education teacher, sports monitor, professional

trainer (in a particular sport), and sports director. This study analyzes sports monitors developing physical activities and sports for adults over 64 years of age. In this sense, Le Roux, Chantelat, and Camy (1999) and *Consejo Superior de Deportes* (2000) state that older adults will be an increasing source of employment for these professionals in the coming decades.

López (2001), *Consejo Superior de Deportes* (2000), and Campos (2009) determine that, in addition to initial training (appropriate degree in physical activity and sport), sports monitors must show professional and personal characteristics such as experience, ongoing specific training, as well as social skills and attitude toward the activity, the profession and the client (the elderly).

In a study on older adults' motivations towards physical activity and sports, Duda (1991) states that monitors should adjust to the circumstances and characteristics of each of the individuals performing the activity and plan classes in a way that they feel fulfilled when they achieve their personal goals. In addition, Hardcastle and Taylor (2001) and Van Norman (1998) argue that monitors should make older adults see that through physical exercise they can improve their quality of life and self-confidence and contribute to the achievement of objectives or goals that motivate them to continue.

In this sense, Shephard (1994) suggests, among other issues, that when designing and developing physical activity and sport monitors should start off from previous habits and acquired skills of older adults, identify and address barriers such as lack of a practice partner; hearing, cognitive, emotional or behavioral problems and, above all, customize exercises.

With respect to the presence of monitors, Ispizua and Monteagudo (2002) state that sports and physical activities for groups of older adults are usually directed and developed by a monitor.

Studies by Jiménez-Beatty (2002) and Martínez, Jiménez-Beatty, Graupera and Campos (2007b) indicate that monitors are commonly present in sport and physical activity practiced by older adults (approximately 65% of individuals) and that women mainly practice in the presence of monitors (around 85%) while their presence among men is low (below 35%). In terms of age, their presence is high at all ages studied; however, it is higher (above 65%) in adults under 75. Likewise, all social classes claim that they practice primarily in the presence of a monitor. No differences are noted within social classes or within individuals with sufficient income and those without.

According to the type of organization, the presence of a monitor is dominant (over 85%) in older adults practicing sports in sports facilities and nursing homes, while their presence is very low (less than 20%) in cases where there is a self-organized activity in public sports spaces open to the entire population. Furthermore, the presence of a monitor is high in water activities and physical exercises.

Based on this context, this research focuses on analyzing the presence of monitors in physical activities and sports practiced by adults over 64 years of age in Spain, taking into account that, as explained above, this is an important factor to reduce some of the barriers in the performance of these activities, to do them properly, and to increase the number of individuals practicing physical activities. Therefore, the objective of this study is to

determine the presence of sports monitors in physical activities and sports practiced by seniors, based on their sociodemographic features, the geographical size of the municipalities, activities conducted, and organizing entities.

Methodology

The methodology consisted of a cross-sectional survey administered to a sample of older adults in Spain. The survey was conducted through a standardized personal interview, using a questionnaire at the residence of each of the persons selected from a statistically representative sample of persons 65 years of age or older in Spain (7,484,392 individuals according to the National Institute of Statistics and the Municipal Voter Registry as of 1-1-2006).

Subjects

The actual sample size is 933 adults 65 years of age or older. The confidence interval is 95.5%; the population variance is the worst case value of $p=50%$, then $q=50%$, and the margin of sampling error allowed is $\pm 3.27%$. The allocation of the sample was proportional to the distribution of the subjects, according to the population size of municipalities and gender (Rodríguez, 2000; Sierra, 2001). The study used multistage probability sampling (Fink, 1995; Miquel, Bigné, Lévy, Cuenca, and Miquel, 1997; Bryman, 2004), in which the first stage units were the municipalities where the elderly reside. The remaining stage units were in the following order (within each municipality selected): neighborhood, street, building, floor, and residence, up to the last units: older adults interviewed. The 933 subjects in the study showed the following characteristics. Regarding gender, 53.1% were women and 46.9% were men. Regarding age, 54.7% were between 65 and 74 and 45.3% were over 75 years. According to their education level, one third had no formal education (36.3%), half only had elementary education (51.5%), 6.7% had high school or vocational training and only 5.4% had completed university studies. As per their distribution according to social class perceived, most considered themselves to be middle class: 55.3% middle-middle class and 27.6% lower middle; only 8.4% considered themselves low class and 8.9% upper-middle or high class. In terms of income, half reported to have enough income (47.4%) but the other half lived with hardships, and 5.1% required financial assistance.

Instruments

In order to obtain the information necessary to meet the objectives of the study and to measure physical activity demands of the elderly and other related variables, it was decided to begin with the Physical Activity Questionnaire for the Elderly (*Cuestionario de Actividad Física y Personas Mayores*), which was prepared by Graupera, Martínez, and Martín (2003) and has already been validated in previous studies on older adults in Spain (Jiménez-Beatty, Martínez, and Graupera, 2006; Jiménez-Beatty, et al., 2007). The questions related to the objectives of this study were selected from the questionnaire. Content validity was assessed positively by four specialists outside the research team. In the pre-test, the instrument was administered to thirty individuals belonging to the universe studied. All participants understood the questions and answer choices, and there were no missing values.

The standardized personal interview using the questionnaire consists of 25 multiple choice closed questions that collect six dimensions related to: sociodemographic characteristics of older adults, their level of practice of sport and physical activity, the activities of individuals practicing, the demand of individuals not practicing but interested in doing so, the motivations of those not practicing or interested, and knowledge seniors have about the

benefits of practicing physical activities and sports. The first three dimensions and those items related to the objectives of the study were the ones selected from the questionnaire.

Procedures

Fieldwork was planned during May 2006. In October and November 2006 interviewers were selected and trained on the questionnaire used in the research, the routes and fees to be applied, and random selection criteria of interviewees. Finally, fieldwork was conducted during December 2006. Interviewers applied the questionnaire through a face to face structured personal interview (Fink, 1995; Bryman, 2004), at the residence of the older adult selected. Interviews lasted an average of fourteen minutes.

Statistical Analysis

Data was tabulated, entered into a computer, and analyzed using a univariate and bivariate descriptive analysis as well as an inferential analysis with contingency tables that included the Pearson's Chi-square value and its significance and the phi correlation coefficient. Data was processed using the software package SPSS for Windows (V 14.0).

RESULTS

The presence of monitors in physical activities and sports performed by older adults is significant in Spain. They are present managing and developing the activities of 63.8% of individuals versus 36.2% where there is no presence.

Their presence in activities performed by women is high with 81.3% while their presence in those conducted by men is very low (37.5%) (Table 1). The relationship of the presence of monitors by gender is moderate ($\Phi=0.45$) and significant ($\text{Chi-square}_1=31.805$; $p=0.00$).

Table 1.

Presence of monitor by gender

	Presence of monitor	No presence of monitor
Women	81.3%	18.7%
Men	37.5%	62.5%

When analyzing the presence of monitors according to the age of persons practicing, similar data is obtained in both age groups studied, although it is slightly higher in individuals younger than 75 years (from 65 to 74 64.1% and over 75 years 62.8%). There is no relationship ($\Phi=0.01$) and it is not significant ($\text{Chi-square}_1 = 0.023$; $p = 0.88$).

Additionally, the presence of a monitor according to social class is very diverse, as it occurs in 65% of upper middle/high class older adults, 57.1% of middle-middle class and 73.5% of lower middle/low class (Table 2). This relationship is fairly weak ($\Phi = 0.14$) and is not significant ($\text{Chi-square}_2 = 2.970$; $p = 0.23$).

Table 2.

Presence of monitor by social class

	Presence of monitor	No presence of monitor
Upper middle/high	65%	35%
Middle middle	57.1%	42.9%
Lower middle/low	73.5%	26.5%

With respect to the level of income, presence is seen in 60.6% of the individuals with sufficient income to live comfortably and in 66.1% of those with no adequate income or with financial support. There is no relationship ($\Phi = 0.06$) and it is not significant ($\text{Chi-square}_1 = 0.482$; $p = 0.49$).

In considering the presence of monitors regarding the demographic size of the municipality, it is observed that the bigger the municipality the higher the presence (Table 3). Similarly, it is obtained that in municipalities under 10,000 inhabitants presence is not dominant (47.6%) while in municipalities over 10,000 inhabitants presence is always dominant and above 60% (Table 3). Subsequently, the relationship is a fairly weak ($\Phi = 0.16$) and is not significant ($\text{Chi-square}_3 = 3.778$; $p = 0.29$).

Table 3.

Presence of monitor by demographic size of municipality

	Presence of monitor	No presence of monitor
Under 10,000 inhabitants	47.6%	52.4%
Between 10,000 and 50,000 inhabitants	60.8%	39.2%
Between 50,001 and 100,000 inhabitants	68.5%	31.5%
Over 100,000 inhabitants	70.6%	29.4%

The presence of a monitor according to the type of physical activity and sport performed is highly diversified. Presence occurs in all individuals in oriental gym classes and in over 60% in physical exercises, physical activities and sports with music and in water. On the contrary, there is little presence in physical activities and sports in nature (14.3%) and no presence at all in throwing games, recreational transportation (walking, jogging, and bicycling to travel across the city) and sports (Table 4). Subsequently, the relationship is moderate ($\Phi = 0.41$) and significant ($\text{Chi-square}_7 = 26.729$; $p = 0.00$).

Table 4.

Presence of monitor by type of physical activity and sport

	Presence of monitor	No presence of monitor
Physical exercise	64.2%	35.8%
Physical activity and sport with music	60%	40%
Oriental gym classes	100%	0%
Physical activity and sport in water	72.7%	27.3%
Throwing games	0%	100%
Recreational transportation	0%	100%
Physical activity and sport in nature	14.3%	85.7%
Sports	0%	100%

Regarding the type of organization, presence of a monitor is dominant in sports entities (87.5% of the elderly) and in nursing homes (79.5%), while it is very low in self-organized activities (4.8%) (Table 5). Subsequently, the relationship is important ($\Phi = 0.74$) and significant ($\text{Chi-square}_3 = 85.755$; $p = 0.00$).

Table 5.

Presence of monitor by type of organization

	Presence of monitor	No presence of monitor
Sports entities	87.5%	12.5%
Nursing home	79.5%	20.5%
Self-organized activity	4.8%	95.2%

Discussion

Presence of monitors in physical activities and sports practiced by individuals over 64 years in Spain is dominant (63.8%). This percentage is similar to the one obtained by Jiménez-Beatty (2002) and Martínez, et al. (2007b). This trend is also described by Ispizua and Monteagudo (2002).

All this data confirms what was mentioned by Campos (2009) and Martínez, et al. (2007a) regarding the importance of having professionals in the physical activities and sports practiced by older adult, the influence these professionals have to reduce barriers and thereby enroll a greater number of individuals to practice, as well as the need to have the right professionals for the activities to be practiced properly and of good quality to thereby ensure benefits for older adults.

The presence of monitors in the activities practiced by older women is larger than their presence for men. This trend was also observed by Jiménez-Beatty (2002), Graupera, et al. (2003), and Martínez et al (2007b). In addition, it should be noted that Martín, et al. (2008) found that older women practice more physical activity and sport than men.

In terms of age, the presence of monitors in activities practiced by older adults is large and at similar rates among individuals from 65 to 74 and over 75 years, as obtained by Jiménez-Beatty (2002).

Regarding social class, the presence of monitors is dominant in all social classes, although the highest percentage of presence occurs in the lower middle class, contrary to what happens in the practice of sport and physical activity, since, as determined by González, et al. (2008), there is a tendency in this case, the lower the social class the less older adults practice physical activities.

When analyzing the presence of monitors according to the level of income, it can be observed that income is not a barrier, since presence is higher for individuals with insufficient income or with financial support. However, it should be taken into consideration that, as shown by McGuire (1985), Shephard (1994), Martínez, et al. (2006) and Del Hierro, et al. (2008), level of income may be a barrier in the practice of sport and physical activity.

As the demographic size of municipalities increases there is a greater presence of monitors, as obtained by Campos Izquierdo, et al. (2006).

Regarding the type of activity, the presence of monitors is especially diverse. While there is total presence in oriental gym classes, presence is nonexistent in throwing games, sports, and recreational transportation. On the other hand, presence is dominant in physical exercise, physical activity and sport with music, and physical activity and sport in water, while it is scarce in physical activity and sport in nature. These results follow the same trend as the data obtained by Jiménez-Beatty (2002) and Campos (2005).

Presence of monitors in physical activities and sports for older adults, developed by sports entities and nursing homes is dominant, as corroborated in studies by Jiménez-Beatty (2002) and Campos (2005).

Conclusions

Presence of monitors in physical activities and sports for adults over 64 years in Spain is dominant. Therefore, importance should be given to sport and physical activity professionals in order to reduce some barriers to practice and achieve a greater number of older adults participating.

With regard to sociodemographic characteristics, presence of monitors in physical activities and sports for older women is larger than for men.

It should also be noted that the presence of monitors is dominant in all levels of social and economic classes.

As the size of the municipality increases there is a tendency to have greater presence of monitors in physical activities and sports for older people.

The presence of monitors depending on the type of activity is very diverse. In physical activity and sport in nature, throwing games, sports, and recreational transportation presence is scarce or nonexistent. In contrast, in physical exercise, physical activity and sport with music, and physical activity and sport in water presence is very dominant, up to reaching a 100% presence in oriental gym classes.

Regarding the type of organization, there is a much higher presence of monitors in sports entities and nursing homes.

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