



Motives for physical exercise in older adults from different contexts: typology and organization in practice

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KEYWORDS

Qualitative
Elderly people
Physical practice
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Typology of practice

ABSTRACT

This study was undertaken to understand the reasons related to typology and organization in physical practice taking into account the perceptions of the older adults. Four focus groups were conducted with a total of 39 older adults. The study participants consisted of 30 women and 9 men (mean age of men and women was $M = 68$ and 67.1 , $SD = 4.7$ years, respectively), from three contexts. These environments were rural area, a neighbourhood at risk of exclusion and a high socio-economic urban context. The methodological analysis is inductive, emergent, delineating the speeches from the specific to the general, through the process of codifying the grounded theory. Several factors appeared after the emergent analysis of the interventions of older adults. In this line, social support and goal setting were prominent factors that served as facilitators for adherence to physical exercise programs. The encouragement and company of others were factors that facilitated adherence to the physical exercise. Relating to sex differences, older male adults prefer to exercise alone, compared to women. Researchers and health professionals can use these results to tailor motivational messages and promote health-enhancing behavioural interventions for older adult populations.

Motivos de ejercicio físico en adultos mayores en diferentes contextos: tipología y organización en la práctica

PALABRAS CLAVE

Cualitativo
Personas mayores
Práctica física
Relaciones intergeneracionales
Tipología de práctica

RESUMEN

Este estudio se realizó para comprender las razones relacionadas con la tipología y organización en la práctica física teniendo en cuenta las percepciones de los adultos mayores. Se realizaron cuatro grupos focales con un total de 39 adultos mayores. Los participantes del estudio fueron 30 mujeres y 9 hombres (la edad media de hombres y mujeres fue de $M = 68$ y $67,1$, $DT = 4,7$ años, respectivamente), de tres contextos diferentes. Estos entornos eran la zona rural, un barrio en riesgo de exclusión y un contexto urbano de alto nivel socioeconómico. El análisis metodológico es inductivo, emergente, delimitando los discursos de lo específico a lo general, a través del proceso de codificación de la teoría fundamentada. Diversos factores aparecieron tras el análisis emergente de las intervenciones de los adultos mayores. En esta línea, el apoyo social y el establecimiento de metas fueron factores prominentes que sirvieron como facilitadores para la adherencia a los programas de ejercicio físico. El estímulo y la compañía de los demás fueron factores que facilitaron la adherencia al ejercicio físico. En relación con las diferencias de sexo, los hombres adultos mayores prefieren hacer ejercicio solos, en comparación con las mujeres. Los investigadores y los profesionales de la salud pueden utilizar estos resultados para personalizar y promover intervenciones de práctica física que mejoren la salud de las personas adultas mayores.

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The important preventive behaviour of physical exercise (PE) – understood as the systematic and controlled action of executing standardized movements, considering the volume-intensity relationship, different from physical activity or physical training – has been related to improved physical health (Hillman et al., 2008). Especially for older adults, exercise has been linked to benefits in physical functionality, including reducing the risk of cognitive impairments (Lee et al., 2013; Whitehead & Blaxton, 2017).

It is important to identify the social and economic determinants of aging that are common to all social settings, thus highlighting important guidelines on which to focus our efforts to improve health and well-being at older ages. The relative importance of factors such as family, work, social relationships, and economic resources to aging outcomes may depend largely on the social, political, and economic contexts in which people age (Hawkesworth et al., 2015).

In relation to social contexts, Ransford's social interaction theory (Ransford, 1982) states that social connections can improve mental health through physical activity. Furthermore, based on existing empirical evidence, Bishop et al. (2020) proposed a conceptual framework showing that behavioural factors, such as physical activity, can be an important mediator of the relationship between the physical and social environment of a neighbourhood and physical and mental health.

In addition to these theoretical assumptions, empirical evidence from cross-sectional and longitudinal studies suggests that both proximal and distal psychological and social environmental factors (e.g., social support for physical activity, self-efficacy, neighbourhood social cohesion) and physical environment (e.g., walking paths, safety, aesthetics, proximity to recreational facilities) are associated with physical activity (Hino et al., 2020; Li et al., 2005; Rosenberg, 2010). In turn, increased levels of physical activity lead to better mental health (Jenkins et al., 2021; Lee & Howard, 2019; McAuley & Rudolph, 2016).

PE studies have shown that older adults are able to maintain exercise due to their considerable improvements in self-esteem, motivation and self-worth (Franco et al., 2015), especially in older women (Dismore et al., 2020). Older adults are motivated to exercise for different reasons; some motivators are related to the person's intrinsic reasons (e.g., having personal goals, etc., Dacey et al., 2008; Eyler et al., 1998). On the other hand, other motivational factors involve social interaction (Buman et al., 2010). These studies suggest that motivation to exercise may come from oneself but can be equally affected by social contexts. How motivation to exercise influences us as we age has not been fully understood. Literature has shown that older adults enjoy physical activity more when sharing it with significant others (e.g., friends and family) (Buman et al., 2010; Dionigi et al., 2013), which could influence their motivation to exercise.

Although exercise in groups may be beneficial for older adults who want to improve physical fitness such as balance, flexibility, and strength (Hughes et al., 2004; Yan et al., 2009), it is unclear whether and how other agents influence motivation.

Importantly, research on exercise motivation for social reasons has been conducted to examine self-centred versus externally oriented goals (McPhate et al., 2016; Simek et al., 2015).

From a psychological perspective, motivation is regularly intertwined with emotion; previous research (Martín-Moya et al., 2020; Steltenpohl et al., 2019) suggests that positive affective responses to messages highlighting the benefits of an activity can lead to positive changes in attitudes and, ultimately, to greater behavioural intentions and preventive conduct, such as exercise (Ajzen, 1991). Once older adults feel positive experiences and emotions because of PE practice, they prefer to continue with this rather than returning to their previous sedentary behaviour (Mikels & Shuster, 2016; Voss et al., 2020). Socio-emotional selectivity theory (SST) describes how aging causes changes in emotional goal setting and proposes that, as age advances, the relative importance of goals changes depending on future perspective (Carstensen, 2006; Carstensen et al., 1999). According to SST, older adults focus more on emotionally significant and present-oriented goals, such as maintaining high-quality social ties with significant others.

Older adults' commitment to PE can be influenced by behavioural factors, such as motivation and personal beliefs, as well as external factors. Qualitative research can provide a better understanding of older adults' implicit theories towards participation in physical activities and help us translate the strong evidence of the benefits of physical exercise into practice (Franco et al., 2015). Understanding this population's perceptions of PE practice motivation can help institutions and healthcare professionals to provide suitable information to help them improve their adherence. Therefore, this study was undertaken to understand what are the reasons related to typology and organization in physical practice taking into account the perceptions of the older adults participating in the study.

Method

Study design

For this study, a qualitative descriptive design was conducted with older adults, who attend PE programmes to maintain their physical function and health-related quality of life. A qualitative design was selected to better understand the perceptions of those older adults about the experiences in which they participated and to clarify the keys to improve their adherence to these fitness maintenance gymnastics.

Participants

According to inclusion and exclusion criteria, the homogeneity factors to facilitate the identification of the groups, and to avoid information bias, have been: a) all participants must be over 60 years of age, b) all participants must be residents of the Andalusian community, and c) all participants must have been attending PE programmes for at least two years. In addition, there are five heterogeneity factors: age, gender, socio-econo-

Table 1

Homogeneity criteria of older adults for inclusion in the focus groups named “risk of exclusion neighbourhood”

Attribute	Value (Number of Participants)
Age	60-64 ($n = 3$)
	65-69 ($n = 5$)
	+70 ($n = 4$)
Sociocultural factor	Basic ($n = 10$)
	Medium ($n = 1$)
	High ($n = 1$)
Level of adherence	Low ($n = 4$)
	Medium ($n = 4$)
	High ($n = 4$)
Years of physical exercise	>10 ($n = 3$)
	5-10 ($n = 4$)
	<5 ($n = 5$)

Note. Sociocultural factors refer to educational level. Level of adherence refers to the days per week participants assisted to PE.

mic (based on income) and socio-cultural factors, and years of physical practice.

The study participants were 39 older adults (30 women and 9 men) from three socio-economic contexts. The mean age of men and women was $M = 68$ and 67.1 , $SD = 4.7$ years, respectively. There were three socio-economic locations: 1) neighbourhood at risk of social exclusion, all women (12 participants group); 2) city center environment with a high socio-economic level, two groups of women and men respectively (8 and 7 participants group); and 3) rural environment, 11 women and one man (12 participants group). These three contexts were located in the province of Granada, southern Spain. A differentiating point of the present study is the inclusion of a focus group composed only of men. For the socio-cultural factor, three values related to educational status are distinguished: basic education, secondary education, and university studies. The factors for years of physical practice were: more than ten years, between 5 and 10 years, and less than 5 years, and for gender, female (F) and male (M).

Procedure

To collect qualitative data for the present study, four focus groups were conducted with a total of 39 older adults; the older adults were recruited for the study by reviewing the data provided by the social and training centers they attended to participate in the exercise programs and determining which ones met the inclusion and exclusion criteria previously established. They were then contacted by telephone and scheduled for the focus group. The focus group meetings lasted approximately one and a half hours and were recorded by audio and video before being transcribed for analysis. Following Hamui-Sutton & Varela-Ruiz (2013), it was considered necessary to use a the-

matic guide as an instrument for the moderator, which had to be composed of open questions related to the topic of study. Subsequently, the information produced, from the video and audio recording of the four focus groups and the notes collected from the observation of each of them, was organized and prepared for processing with Nvivo software (Version 12, QSR International Pty Ltd, Melbourne, Australia). The ethical and good practices criteria established for research by the University of Granada have been faithfully followed, registered with the number 178/CEIH/2020. In creating the focus groups, permission was requested from each centre where the older adults attended their PE practices to be able to meet with them and carry out all the focus groups.

Data analysis

The methodological option for the analysis is mixed, based on the previous questions marked in the Focus Group script (deductive) and inductive (emergent), based on the discourses of the participants. Some of the guidelines established in Grounded Theory were used, outlining the discourses of the study from the particular to the general, through the process of categorization and subsequent coding (Glaser et al., 2019). The general results from the data themselves and, in this case, from the discourse of older adults (Paz Sandín, 2008). An axial, open coding has been performed, based on the previous and emerging categories, mainly in the second and third levels of categorization, based on the interpretation of the researchers. The data analysis, supported by NVivo software, relied mainly on the coding matrix to bring out the relations between the different categories and to cross-reference the categories that were always relevant for the analysis and the attributes that make up the criteria of homogeneity and heterogeneity (Trigueros Cervantes et al., 2016).

Following the approach of Vasilachis de Gialdino (2006), which draws on the contributions of Richardson & Pierre (2017), to interpret discourses and their intersections with both the formal and implicit theories of the researcher, the analysis is developed from a holistic view using the metaphor of crystallization. Where there are multiple faces that cross different perspectives of the study, then we have to be aware that they will not be static, but rather in constant change and movement. Richardson & Pierre (2017) tells us that “we do not triangulate; we crystallize... The central imaginary is the crystal, which combines symmetry and substance with an infinite variety of forms, substances, transmutations, multidimensionalities and angles of approach” (p. 135).

Results

This section presents a main theme that reflects how the older adults perceived and experienced their involvement in the PE programme in their relationship with significant others. Based on this main topic, four subtopics appear: 1) opportunities for social relationships according to participants' gender, 2) typology of practice and benefits of social relationships

according to participants' gender, 3) adherence and years of regular physical practice, and 4) typology of physical practice in social contexts.

Opportunities to foster social relationships according to participants' gender

Physical activity is an effective way to socialize, aiming to spend time with someone important, make new friends, or exercise to forget problems and release tension (Steltenpohl et al., 2019). The older adults mentioned being motivated to exercise and thus interact with family and friends, while talking about the fun and enjoyment of exercising with other people was considered as meaningful. An older adult said: "Look, one of the joys is to meet the same group so many times, you laugh, they tell you their problems, because you don't see each other every day and you don't have that time to talk".

We found differences between men and women within the focus groups (Table 2). Men did not usually show such a predisposition to seek social relationships when doing PE (Burke et al., 2006). It could be seen in the discourses of men in the urban context: "I don't come here looking for friends, I'm a bit weird. I say 'hello' and little else" (89, Apolo) or "Here sometimes we don't even say hello, we enter like horses and don't even look" (90, Proteo). It has been reported that men clearly manifest their choice of practice and their minimal interest in relating to others and establishing new bonds of friendship.

In contrast, women's statements were found to be quite opposite to those of men. At this moment, one of the most important themes for women appears in this research: the emotion inherent in the speeches can be seen when they talk about their positive experiences and how these social relationships have made them live their lives happily or have allowed them to overcome difficult personal moments and situations thanks to the treatment received from their peers. Perhaps Ceres's intervention is one of the most emotional, especially noted in the observations of the focus group, and which best exemplifies what attending PE classes means to her in terms of overcoming her personal situation of loneliness:

"That is not paid with money, it's paid with love, because you see yourself alone in your house, crying because I have seen myself alone. Now I am surrounded by nice people although I have only been here one year, and I think there is no money that can pay for this" (45, Ceres).

These findings coincide with those found by Burke et al. (2006) and Lavizzo-Mourey et al. (2001), in which men, due to their previous experiences, prefer to exercise alone, while women orient their practice more towards group classes.

These differences between men and women when looking for social relationships could be due to the feeling of shame that men tend to show when exposing themselves to situations that they do not control: "I think that men don't join these kinds of practices because they are ashamed of what others might say, I think they think so, even if they don't say it" (70, Ceres).

Typology of practice and benefits of social relationships according to participants' gender

All focus groups have valued friends and family members as important facilitators in reaching personal exercise goals. If we focus on the typology of PE to achieve these objectives, we find free, individual and group physical practice, led by a professional.

The practice of PE in groups presents social and enjoyment benefits that has been confirmed in several studies (Farrance et al., 2015; Rosenkranz et al., 2013). Exercising with others also provided many older adults with a means to improve health outcomes, mediated by their external social motivation (Clare Farrance et al., 2016).

In the interventions of the different focus groups, men did not show this predisposition for social relationships, as commented in the previous section. However, older women emphasized that exercise was an opportunity for social interaction and highlighted that exercising with their peers was fun and enjoyable. Likewise, they also saw PE as an opportunity to promote close personal connections and even to make new ones:

"It is true, it is a sensation, not only in health, it is a sensation of psychological well-being, not just physical. You also end up making friends who have similar hobbies to yours, you talk, you laugh as well, etc." (7, Hecate).

"There are times we say ok, let's do something after class. I have made real friends here, only a few because it is complicated, but we have maintained the relationship. It's a short time, but you are able to make a new friend like maybe you've never had before. It has given me a lot in that sense" (85, Artemisa).

PE practiced with significant others, either freely or in groups, has been shown to be a facilitator for the improvement of social relations in older adults (Buman et al., 2010; Jiménez, 2015). PE groups encouraged participants to do more than they would do on their own, or to work harder. This was achieved through social peer pressure or healthy competition about the effort made by their peers during each session (Lindsay-Smith et al., 2018).

Following Steltenpohl et al., (2019), this topic refers to the participants' perceptions about the evaluations of other fellow practitioners and how their evaluations have an impact on exercise behaviours and their motivations to exercise. In this sense, older adults often discussed the important role that other groups, for example younger people, played in providing emotional support by transmitting expert knowledge, helping to facilitate safe and challenging workouts, and making them feel comfortable in group exercise contexts "When you are in a guided class and there may be very experienced young people next to you, they teach and help you, and I have connected with young people very well" (56, Nemesis). The value of help and support from other people is closely linked to a positive feeling in this type of intergenerational relationship (Aguilera-Hermida

et al., 2020), “for example, I have been doing Pilates at 12:00 when there are more young people and they encourage you a lot, they told me that I can do it, and I believe their words and of course I can” (57, Artemisa).

Typology of practice and its influence on adherence and years of physical practice

If we observe the type of practice according to the level of adherence and years of practice of the four focus group participants (Table 2), it is observed how the higher the level of adherence to the practice, the greater the preference for guided PE:

“I think that if we do it on our own it is not the same, coming to the gym is a satisfaction. In my experience, I can’t do anything at home on my own. Coming here is an obligation, but it is good for my general health” (37, Circe).

Likewise, the older women participating in the study preferred to be guided to use the correct technique of the exercises, thereby increasing their safety in the practice and ensuring the variety and specificity of the proposed activities, as we see in Leto’ speech: “because I prefer that a person tells me how to do it. The professional tells you a lot of exercises that you have no idea how to do. Being with a monitor is not the same as being alone” (48, Leto).

These findings, which are in line with those shown by a number of studies based on the benefits of social identification (Haslam et al., 2016a, 2016b), show the promotion of physical practice (Hughes et al., 2009) and increased adherence to PE practice of up to 70% more if performed in a group setting (Clare Farrance et al., 2016). As exemplified by the interventions of the older adults in this research, this type of guided group practice increases adherence based on three key aspects: social connection, enjoyment derived from social relationships, and emotional support from the group (Biedenweg et al., 2014; Clare Farrance et al., 2016; Killingback et al., 2017). When the social relationships arising from the practice of PE acquire relevance, we see how the friendship that emerged becomes a really important aspect, moving from a guided PE class to a class shared with friends and a very good environment in which physical and psychological benefits are also obtained thanks to physical practice.

Table 3 can be explained by the feeling of attachment that friendship generates and that feeling not only of regret if they classes are missed and activities are not done, but also of missing out on meeting new friends and being left out of social news.

Similarly, a study of older women reported that social connections and group support were a reason to continue attending their PE training classes (Mobily et al., 2017). In addition, a recent systematic review highlighted the importance of a positive social environment for the participation of older adults in physical practice (Franco et al., 2015).

Table 2

Search for social relationships in practice according to the gender of the participants

	Male	Female
Social relations		
Training alone		

Note. The colour gradient indicates the intensity of the speech of older adults based on the results found.

Table 3

Type of practice according to adherence and years of practice

	High Adherence	Years of practice > 10
Guided practice		
Free practice		

Note. The colour gradient indicates the intensity of the speech of older adults based on the results found.

Table 4

Typology of practice according to gender and kind of facility used by participants

	Men	Women	Men	Women
Guided practice				
Free practice				

Note. The colour gradient indicates the intensity of the speech of older adults based on the results found.

Typology of physical practice in different social contexts

The contexts of the participants' practice in this study were the social centres offered by the town councils of each area and a private sports club. Regarding the type of facility, older adults attending social centres perform guided PE more often (Cleland et al., 2013) than free practice (Table 4). If we focus on the context of the sports club, the choice of doing PE in one way or another appears more equal, showing a certain inclination in favour of free practice by men and a clear trend towards guided PE by women. This fact could be explained since one of the two participating groups is composed entirely of men, and they prefer to perform PE on their own. Following Franco et al. (2015), we see that in this case, men tend to practice PE autonomously without resorting to social environments such as group physical practice. Likewise, the options offered by the urban environment, in contrast to the neighbourhood at risk of exclusion and the rural context, mean that both free practice and guided practice can have equal prominence due to the type of installation, conditions, material, and organization (Gluchowski et al., 2018), providing more stable environments to perform PE safely for the elderly (Fragala et al., 2019).

In regard to the context of the social centre, we saw how women still prefer practicing in a guided way, rather than practicing autonomously. It also appeared that men are inclined towards this guided practice, a fact that could be explained since there are only two men, one in each group that attend this social centre, and joining group trainings is their only choice, so it is understood that they are targeting this type of activity rather than the other as the rest of the male participants do when they can choose between types of practices.

The aforementioned reasons determine a greater predominance of guided physical classes as opposed to free practices. These reasons have also been reflected in other studies such as environmental factors (Morris et al., 2008), accessibility to spaces for PE (Olanrewaju et al., 2016), the sense of safety in the neighbourhood (Mathews et al., 2010), that limit or condition physical practice opportunities. Along these lines, we found similarities in terms of the kind of practice chosen by the group, either from the social centre of the neighbourhood at risk of exclusion, resembling rural environments and those at risk of exclusion in terms of practice conditions (Cleland et al., 2013; Gray et al., 2016). The speeches of the participants showed how in settings that are *a priori* not as developed in terms of facilities and materials, such as the neighbourhood at risk of exclusion and the rural environment, they preferred to perform physical exercise in a guided way.

Conclusions

These findings suggest that messages aimed at increasing physical practice could be adapted to older adults' socially oriented preferences and motivations. Researchers and health professionals can use these results to tailor motivational messages and promote health-enhancing behavioural interventions for older adult populations. Some of the reasons and benefits

discussed by the participants in this research included adaptation to major life events, activity-based cognitive stimulation, improved quality of life and stress reduction, enjoyment of activity, and socialization.

It has been observed how social and structural inequalities influence the levels of participation in PE practices among older adults. Therefore, when physical activity is meaningful to older adults, this population group is more likely to continue participating and maintain their level of adherence.

Nevertheless, it has been shown that friends and family played an important role in motivating participants to exercise. Older adults generally referred to social motivators to exercise, emphasizing maintaining and fostering relationships with other significant peers and increasing opportunities to socialize. Likewise, PE carried out with significant people, whether in a free or guided situation, has been shown to be a facilitator for the improvement of social relations in the group of older adults. Male older adults generally expressed their desire to exercise alone much more frequently compared to females, who mostly declared a preference for physical practice in the company of their peers.

Finally, older adults often argued about the importance of other population groups, for example, younger people, had in providing emotional support by transmitting expert knowledge, helping to facilitate safe and challenging training, and making them feel comfortable in contexts of group exercise. These findings appeared in the group that attends the sport club, compared to those who attend social centres that have a negative image of intergenerational relationships since they do not feel valued by young people. A limitation of the study could be the kind of activity offered and its influence on the practice motives of older adults. Likewise, the physical exercise professional who teaches the classes may be a factor to take into account as that person directly influences motivation and adherence to the programme.

Researchers and healthcare professionals can use these results to personalize motivational messages and promote health-enhancing behavioural interventions based on physical exercise practices for older adult populations.

Conflict of interest

The authors have no conflicts of interest to declare.

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