

## Motivational factors for physical exercise practice in a Health Club context

### Los factores motivacionales para la práctica de ejercicio físico en el contexto de un Club de Salud

### Fatores motivacionais para a prática de exercício físico em contexto de Health Club

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**Abstract.** Health Clubs emerge as the preferred location for physical exercise, with Portugal exhibiting geographical asymmetries in their distribution. This study aimed to analyze the motivational factors and sociodemographic determinants of physical exercise practitioners in a Health Club context. Thirty-four individuals ( $24,7 \pm 11,5$  years) participated in this study. To assess motivational factors, the translated and adapted version of the Exercise Motivation Questionnaire was used. Dimensions of "Well-being," "Health," "Stress Control," and "Appearance/Esthetics" presented the highest values (average ratings higher than 4 points on a 1-6 Likert scale), while "Personal Valuation" and "Medical History" dimensions were the least valued (average ratings lower than 3 points). Younger and single individuals placed more value on "Appearance/Esthetics," whereas older and married individuals attributed more importance to "Personal Valuation." Women placed more emphasis on "Physical Condition." The most motivating factors are grouped in the dimensions of "Well-being," "Health," "Stress Control," and "Appearance/Esthetics," while the least motivating factors are in the dimensions of "Personal Valuation" and "Medical History." Age, marital status, and gender were found to be determinants of some of motivational factors' dimensions.

**Keywords:** Motivation, Sociodemographic Determinants, Physical Exercise, Health Club, Interior of Portugal.

**Resumen.** Los Clubes de Salud emergen como la ubicación preferida para el ejercicio físico, con Portugal exhibiendo asimetrías geográficas en su distribución. Este estudio tuvo como objetivo analizar los factores motivacionales y los determinantes sociodemográficos de los practicantes de ejercicio físico en el contexto de un Club de Salud. Treinta y cuatro individuos ( $24,7 \pm 11,5$  años) participaron en este estudio. Para evaluar los factores motivacionales, se utilizó la versión traducida y adaptada del Cuestionario de Motivación para el Ejercicio. Las dimensiones de "Bienestar", "Salud", "Control del Estrés" y "Apariencia/Estética" presentaron los valores más altos (puntuaciones promedio superiores a 4 puntos en una escala de Likert de 1-6), mientras que las dimensiones de "Valoración Personal" e "Historial Médico" fueron las menos valoradas (puntuaciones promedio inferiores a 3 puntos). Los individuos más jóvenes y solteros dieron más importancia a "Apariencia/Estética", mientras que los individuos mayores y casados atribuyeron más importancia a "Valoración Personal". Las mujeres hicieron más hincapié en "Condición Física". Los factores más motivadores se agrupan en las dimensiones de "Bienestar", "Salud", "Control del Estrés" y "Apariencia/Estética", mientras que los menos motivadores se encuentran en las dimensiones de "Valoración Personal" e "Historial Médico". Se encontró que la edad, el estado civil y el género son determinantes de algunas dimensiones de los factores motivacionales.

**Palabras clave:** Motivación, Ejercicio Físico, Determinantes Sociodemográficos, Club de Salud, Interior de Portugal.

**Resumo.** Os *Health Clubs* surgem como o local de eleição para a prática de exercício físico, sendo que em Portugal se verificam assimetrias a nível da sua localização geográfica. O presente estudo objetivou analisar os fatores motivacionais e determinantes sociodemográficos de praticantes de exercício físico em contexto de *Health Club*. Participaram neste estudo 34 indivíduos ( $24,7 \pm 11,5$  anos). Recorreu-se à versão traduzida e adaptada do Questionário de Motivação para o Exercício. As dimensões do "Bem-Estar", "Saúde", "Controlo do Stress" e "Aparência / Estética" apresentaram os valores mais altos (classificações médias superiores a 4 pontos numa escala de Likert de 1-6) e, ao invés, as dimensões da "Valorização Pessoal" e "Historial Médico" são as menos valorizadas. (classificações médias inferiores a 3 pontos). Os indivíduos mais novos e solteiros valorizam mais a "Aparência/Estética", ao passo que os mais velhos, e casados, atribuem mais importância à "Valorização Pessoal". As mulheres dão mais relevo à "Condção Física". Os fatores mais motivadores estão agrupados nas dimensões "Bem-Estar", "Saúde", "Controlo do Stress" e "Aparência / Estética", enquanto os fatores que menos motivam nas dimensões da "Valorização Pessoal" e "Historial Médico". A idade, estado civil e sexo revelaram-se determinantes de algumas das dimensões dos fatores motivacionais.

**Palavras-chave:** Motivação, Exercício Físico, Determinantes Sociodemográficas, Health Club, Interior de Portugal.

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## Introduction

Physical activity, defined as any bodily movement produced by skeletal muscles resulting in energy expenditure, is distinguished from physical exercise, as a planned, structured, repetitive activity purposefully focused on improving or maintaining one or more components of physical fitness (Dasso, 2019). Physical exercise is one of the best strategies to achieve a healthier population and enjoy a higher quality of life. (Bermejo et al. (2018). Specifically, physical exercise in the coming years may be redefined in

light of a new perspective on life and will depend on: firstly, the realization that the emergence of imbalances or certain diseases is closely related to the absence of physical activity; secondly, it will depend on the need for the body rediscovery, on the reconnection with nature. These circumstances will likely underpin a renewal of these activities where biological, psychological, and socio-emotional benefits may be found, crucial for better intra and inter-human relations. In this regard, Ciríaco (2021) states that we need each other for the discovery and correction of mistakes, to educate a new spirit of tolerance and solidarity, two joint messages

that are beneficial to social well-being and community health.

In this perspective and according to Morris and Roychowdhury (2020), physical exercise practice depends on individual's specific motivation. Data from the European Commission's Eurobarometer on Sport and Physical Activity (2018) indicate lack of motivation as the second cause for physical inactivity among the Portuguese adult population. Different types of motivation, whether intrinsic or extrinsic, shape individuals' reasons for engaging in physical exercise." (Deci & Ryan, 2000). According to Markland and Ingledew (1997), motivational factors can be divided into intrinsic and extrinsic. Intrinsic motivational factors include reasons such as the enjoyment of exercise, feeling competent, and revitalized by it. On the other hand, extrinsic motivational factors are related to issues that are external to a particular activity participation, such as social status, recognition from others, and physical appearance.

For a better understanding of individuals' behavior related to physical exercise practice, as for better guidance in their activities, it is essential to know the reasons why they select, persist and engage in them with intensity (Azevedo et al., 2021). It can be questioned and problematized the reasons why certain individuals engage in specific physical exercise activities for the development of capacities related to effort and overcoming challenges (Bento, 2012). In this sense, many people seek spaces for the practice of physical exercise activities to recover from the daily life stress or to enjoy the emotionality pleasure, to seek maximum socialization opportunities, aspects related to joy and well-being, and the aesthetic beauty that physical and sports activities convey. It also allows to maintain physical condition and social interaction, where education for balanced individual development can naturally emerge (Bento, 1995).

Being involved in long-term physical exercise practices depends on the interaction of various factors, including psychological, social, organizational, and engagement criteria, as well as demographic, behavioral, economic, and physiological variables when studying sustained physical exercise with specific goals. In this equation, motivational factors are fundamental for the maintenance of long-term physical exercise practices (Lally et al., 2013; Phillips et al., 2018; Rivera-Torres et al., 2019; Rodrigues et al., 2020; Rodrigues & Monteiro, 2021; Silva et al., 2011; Zeng et al., 2017). All these factors allow us to understand that the determinants of physical activity, more specifically of physical exercise practices, are not isolated variables but interact dynamically to influence behavior and the pattern of this interaction over time (Buckworth & Dishman, 2002).

Identification and understanding of these factors can allow comprehension of this phenomenon related to physical exercise and enable careful reflection on strategies that may provide safe and effective guidance for behavior change in inactive individuals or for the maintenance of organized and structured physical exercise practice in the long term.

Fitness clubs (commonly referred to as Health Clubs) are among the most popular and sought-after venues for

physical exercise practice (Campos et al., 2021). The fitness sector is systematically growing worldwide (Tsitskari, 2022), with the Health Club industry accounting for approximately 183 million members (IHRSA, 2019). Specifically focusing on Western European countries (including Portugal), it is estimated that 15% of the population attends a Health Club (IHRSA, 2019). The main reason for this influx is the fact that they are located near where people live and/or work, have flexible opening hours, and offer a wide variety of activities (Gjestvang et al., 2019). Identifying the reasons for physical exercise practice is relevant for Health Club managers to develop customer acquisition strategies (Pedersen et al., 2021).

According to "Portugal Ativo" (Portugal Fitness and Health Clubs Association), the geographical distribution of Health Clubs in Portugal presents asymmetries. It is in major urban centers where almost half of the Health Clubs in the country are concentrated (Lisbon: 36%; Porto: 13%). The interior districts of the country have very low representation, with values below 1% (Pedragosa et al., 2022).

Through literature review, we found several studies focused on the motives for physical exercise practice in Health Clubs (Ascensão, 2012; Deelen et al., 2018; Gjestvang et al., 2020; Larsen et al., 2021; Moutão, 2005; Moutão et al., 2012; Mullen & Whaley, 2010; Riseth et al., 2019; Ulseth, 2008). However, only a few studies (Ascensão, 2012; Larsen et al., 2021; Moutão, 2005; Mullen & Whaley, 2010) focus on the analysis of sociodemographic determinants of motivational factors for exercise in a Health Club context, and this analysis is based only on two determinants (gender and age).

Regarding studies conducted in Portugal, only one study focused on Health Clubs located in municipalities in Portugal's interior region (Ascensão, 2012). As cultural, socioeconomic, and environmental contexts can influence motivational factors, understanding these specific influences is crucial for developing interventions and physical activity promotion programs tailored to local needs (Sallis et al., 2015). Therefore, our study aims to analyze the motivational factors and their sociodemographic determinants (gender, age, marital status, locality) in a physical exercise practitioners' sample in the context of a Health Club located in an inland municipality of Portugal.

## Method

This is a cross sectional quantitative study, which is useful for establishing preliminary evidence in planning future studies. (Wang & Chang, 2020). Quantitative sociodemographic studies offer a systematic and robust approach to investigate the relationships between sociodemographic characteristics and behaviors, and, in our study case, with a focus on physical exercise practice, providing a deeper and more comprehensive understanding of these behaviors' influencing factors.

## Sample

The study group consisted of 34 attendees of a Health Club in the municipality of Aguiar da Beira, district of Guarda (Portugal), with age over 16 and regular use of the Health Club (at least twice a week) being considered as inclusion criteria. Failure to complete all items of the questionnaire was considered an exclusion criterion. Regarding age, two comparison groups were created based on the mean as a cutoff value, in order to distinguish between "older" and "younger" individuals. For inferential analysis, gender was also considered, subdivided into "male" and "female" categories; marital status subdivided into "single," "married"; as well as locality, subdivided into "Resident in the town of Aguiar da Beira," "Resident in the Municipality," and "Resident outside the Municipality."

### *Data collection instruments*

For this study's purpose, the Exercise Motivation Inventory-2, originally developed by Markland and Ingledew (1997), was utilized, specifically its Portuguese version, translated and validated by Ascensão (2012). As the instrument had already undergone a prior validation phase, aimed at enhancing its intelligibility and comprehension, the second phase naturally resulted in the maintenance of the 49 items, as recommended in the literature (Cid et al., 2022; Hair et al., 2019), which were grouped to form ten dimensions: 1) Competition/Recognition; 2) Health; 3) Appearance/Esthetics; 4) Stress Control; 5) Weight Control; 6) Physical Condition; 7) Affiliation; 8) Well-being; 9) Medical History; and 10) Personal Valuation. A 6-point agreement scale was assigned to classify the items' valorization and importance, ranging from "one" (not at all true) to "six" (completely true).

### *Procedures*

Regarding the methodological aspects leading to the organization and subsequent data collection, i.e., of the instrument's application protocol, the following steps were undertaken: a) Health Club and Technical Director's (TD) telephone contacts and respective email addresses' collection; b) telephone contact with the TD to explain the study objectives and obtain authorization for its conduct; c) questionnaire's personal delivery, with the researcher's absence during the filling period to avoid influencing responses; d) questionnaires' collection within one week after personal delivery.

Care was taken to create and maintain a welcoming environment, concluded with gratitude for participation in the study and sincerity for the responses provided. All criteria established by the General Data Protection Regulation (GDPR) have been duly complied with in the scope of this study, with all personal information collected during the research process being treated with the utmost confidentiality and in accordance with the GDPR provisions. All technical and organizational measures have been implemented to ensure the security and protection of participants' personal data. Additionally, we obtained informed consent from all study participants. Participants were informed about the

study objectives, data collection procedures, intended use of the information, and their rights regarding the provided personal data. They were assured that their participation was voluntary and that they could withdraw their consent at any time without any adverse consequences.

### *Statistical Analysis*

According to the predefined objectives, descriptive and inferential data analyses were conducted using version 29 of the IBM Statistical Package for the Social Sciences (SPSS), setting the confidence interval at 95%, thus defining the significance level of the study (p-value) at 0.05. In addition to the application of parametric comparison tests (ANOVA and T-test), the use of non-parametric tests (Mann-Whitney and Kruskal-Wallis) was due to the failure to meet the requirements for the use of parametric tests, specifically the absence of distributions' normality (Marôco, 2018). The results reveal, according to the scale and dimensions created and mentioned above, the respondents' perception of a set of indicators that allow inference about the importance they attach to Health Club attendance. The starting point was based on the judgmental conception, language dynamic and on the interpretation (meaning) that a respondent attributes to the concepts, also considering the contextual conditions of their producers.

## **Results**

### *Participant Characteristics*

The participants in this study have a mean age of 24.70  $\pm$  11.50 years. There is a predominance of male individuals (67%), married (88%), and residents in the village of Aguiar da Beira (56%).

### *Motivational factors for exercise practice*

Regarding the motivational factors for physical exercise practice, participants in our sample indicated the dimensions of "Well-being," "Health," "Stress Control," and "Appearance / Aesthetics" as the most important for their exercise practice at the Municipal Gym of Aguiar da Beira. It is worth noting that each of these dimensions had an average score above 4 points on our Likert scale. Conversely, factors related to "Personal Appreciation" and "Medical History" dimensions were less valued by the participants in our sample (average scores below 3 points).

### *Motivational factors' determinants for exercise practice*

Regarding age, statistically significant differences were found in the motivational factors grouped (Table 3) under the "Appearance / Aesthetics" and "Personal Appreciation" dimensions. In the "Appearance / Aesthetics" dimension, individuals aged 16 to 24 years gave it greater importance ( $p = 0.021$ ), while in the "Personal Appreciation" dimension, the opposite occurred, with individuals aged 25 to 58 years showing higher motivation values ( $p = 0.00$ ).

Focusing on gender, significant differences were only

found in the "Physical Condition" dimension, with female individuals showing higher motivation values ( $p = 0.04$ ).

Referring to marital status, statistically significant differences were found in the "Appearance / Aesthetics" and "Personal Appreciation" dimensions. In this first dimension, unmarried individuals gave it greater relevance ( $p =$

0.04), while in the "Personal Appreciation" dimension, the opposite occurred, with married individuals showing higher motivation values ( $p = 0.00$ ).

The participants' place of residence was not a determinant of any of the dimensions of motivational factors ( $p > 0.05$ ).

Table 1  
Motivational factors' determinants for exercise practice

Characteristics	Competition/ recognition	Health	Appearance/ Aesthetics	Stress control	Weight	Physical condition	AF	Well-being	Medical history	Personal appreciation
Age			a							b
Between 16-24	3,60 ± 0,70	4,10 ± 0,70	4,2 ± 1,10	4,00 ± 0,90	3,20 ± 1,20	3,70 ± 0,90	3,10 ± 1,00	4,50 ± 0,60	1,50 ± 1,50	1,80 ± 1,30
Between 25-58	3,30 ± 0,80	4,60 ± 0,40	3,6 ± 0,80	4,10 ± 1,10	3,50 ± 1,30	4,20 ± 0,90	3,20 ± 0,80	4,30 ± 0,70	2,30 ± 2,00	3,40 ± 0,70
Gender						c				
Male	3,40 ± 0,70	4,20 ± 0,70	4,00 ± 1,10	3,90 ± 1,00	3,20 ± 1,30	3,60 ± 1,00	3,00 ± 0,90	4,40 ± 0,60	1,90 ± 1,60	2,30 ± 1,20
Female	3,60 ± 0,90	4,50 ± 0,60	4,30 ± 0,70	4,40 ± 0,60	3,40 ± 0,80	4,30 ± 0,50	3,50 ± 0,90	4,70 ± 0,50	1,40 ± 1,70	2,10 ± 1,60
Marital status			d							e
Married	3,90 ± 0,90	4,60 ± 0,50	3,40 ± 0,70	4,30 ± 0,60	3,80 ± 1,30	4,10 ± 1,10	3,50 ± 1,00	3,90 ± 0,30	1,50 ± 1,30	3,10 ± 0,30
Single	3,40 ± 0,70	4,20 ± 0,70	4,10 ± 1,00	4,00 ± 1,00	3,20 ± 1,20	3,80 ± 0,90	3,10 ± 0,90	4,50 ± 0,60	1,70 ± 1,70	2,20 ± 1,40
Locality										
AG	3,50 ± 0,80	4,20 ± 0,70	3,80 ± 1,20	3,90 ± 1,10	3,20 ± 1,30	3,60 ± 1,10	3,00 ± 0,90	4,40 ± 0,60	1,50 ± 1,60	2,10 ± 1,30
Villages in AG	3,70 ± 0,50	4,30 ± 0,60	4,50 ± 0,60	4,10 ± 0,70	2,90 ± 1,00	4,20 ± 0,80	3,50 ± 0,30	4,30 ± 0,70	2,20 ± 2,10	2,60 ± 1,60
Outside AG	3,20 ± 0,90	4,70 ± 0,40	4,40 ± 0,50	4,60 ± 0,40	3,80 ± 1,20	4,10 ± 0,70	3,20 ± 1,30	4,80 ± 0,40	1,80 ± 1,00	2,30 ± 1,50

Notes: <sup>a</sup> Statistically significant differences between individuals aged 16 to 24 years and individuals aged 25 to 58 years ( $p = 0,021$ )

<sup>b</sup> Statistically significant differences between individuals aged 16 to 24 years and individuals aged 25 to 58 years ( $p = 0,00$ )

<sup>c</sup> Statistically significant differences between male and female individuals ( $p = 0,03$ )

<sup>d</sup> Statistically significant differences between married individuals and single individuals ( $p = 0,04$ )

<sup>e</sup> Statistically significant differences between married individuals and single individuals ( $p = 0,00$ )

AG = Aguiar da Beira

AF = Affiliation

## Discussion

Data from the 2017 Eurobarometer survey place Portugal as one of the four European Unions' countries with the highest rates of physical inactivity, with 79% of Portuguese adults stating that they "never or rarely" engage in physical exercise (European Commission, 2018). According to the same survey data, one of the main barriers to physical exercise practice is the lack of motivation. Health Clubs are a preferred location for physical exercise practice in Western countries (IHRSA, 2019). The results of our study demonstrate that the factors that most motivate our participants to engage in physical exercise in a Health Club context are integrated into the "Well-being," "Health," "Stress Control," and "Appearance/Aesthetics" dimensions. Conversely, the least considered motivational factors by participants are integrated into the "Medical History" and "Personal Appreciation" dimensions.

In Moutão's study (2005), conducted with a sample of 1045 individuals practicing fitness activities in Health Clubs from various locations in Portugal, the authors concluded that the most relevant motivational factors for physical exercise practice were "Health" and "Well-being". On the other hand, "Competition/Recognition" and "Medical History" factors were recognized as the least important for physical exercise practice. In Moutão et al.'s study (2012), with a sample of 1498 practitioners, the most important factors for physical exercise practice were "Health," "Physical Condition," and "Stress Control". Conversely, the least important factors were "Competition/Recognition" and

"Medical History". In Ascensão's study (2012), with a sample of 203 subjects practicing fitness activities in Health Clubs in Castelo Branco's district, the most important factors considered were "Well-being," "Health," "Stress," and "Physical Condition". As less important factors, "Personal Appreciation," "Medical History," and "Competition/Recognition" were noted. It is noteworthy that Ascensão's study (2012) was conducted in an inland region of Portugal, similar to what happened in our study.

Comparing our results with those found in studies conducted with Portuguese Health Club practitioners that used the same questionnaire that was applied in the present study, we can see that factors related to "Health," "Well-being," and "Stress Control" dimensions are considered the most motivating factors for physical exercise practice. Regarding the factors that least motivate people to engage in physical exercise, there is convergence between the present study and the studies presented, as they are grouped under the "Medical History" dimension. Regarding the other less valued dimension, there is a discrepancy between the present study and the studies presented ("Personal Appreciation" vs. "Competition/Recognition"). However, it should be noted that, in Ascensão's study (2012), "Personal Appreciation" was also one of the least valued motivational dimensions.

Focusing in other countries, in a study conducted with 250 Norwegians Health Club members, the most prevalent reasons for engaging in physical exercise were "Health" and "Increase in physical fitness" (Gjestvang et al., 2020). These results are consistent with those found in the studies by Mullen and Whaley (2010) and Riseth et al. (2019). In

Larsen et al.'s study (2021), the greatest motivation for practitioners was "Increase in physical fitness". Other authors who investigated reasons for exercising in different activity environments revealed that Health Club members are more likely to report reasons such as "Appearance" than social factors and pleasure, compared to individuals who exercise in sports clubs or public spaces (Deelen et al., 2018; Ulseth, 2008).

Regarding the determinants of motivational factors for the practice of physical exercise, in the present sample, younger individuals (between 16 and 24 years old) place more value on "Appearance/Aesthetics" and less value on "Personal Appreciation" compared to older individuals (between 25 and 56 years old). Regarding gender, women value "Physical Condition" more when compared to men. In terms of marital status, single individuals place more importance on "Appearance/Aesthetics" and less importance on "Personal Appreciation" when compared to married individuals.

Ascensão (2012), Mullen and Whaley (2010), and Moutão (2005) support the greater emphasis given to the "Appearance/Aesthetics" dimension by younger people. This may indicate that motivation for training at younger ages is more naturally extrinsic, which may stem from social demands to achieve slim bodies and a youthful appearance (Larsen et al., 2021). Regarding the "Physical Condition" dimension, other studies also support that the importance given to this dimension was higher in women compared to men (Larsen et al., 2021; Moutão, 2005; Mullen & Whaley, 2010).

Marital status is a significant demographic factor that can influence an individual's motivation to engage in regular physical exercise, particularly in health club settings. Research has shown that marital status impacts not only the frequency of exercise but also the underlying motivational factors driving individuals to participate in physical activities (King et al., 1998). Fleury and Lee (2006) found that single health club members are more likely to prioritize physical attractiveness and social interaction as key motivators for their exercise routines. Conversely, married individuals often cite health benefits and stress reduction as primary motivators for exercising (Hull et al., 2010).

In this context, there are limitations that need to be highlighted in our study: 1) cross-sectional study, which cannot provide a cause-effect relationship; 2) small sample size. However, we emphasize the following strengths: 1) one of the few studies focused on motivational factors and analysis of their sociodemographic determinants for physical exercise practice in a Health Club context; 2) one of the few studies conducted on this topic in a municipality in the interior of Portugal; 3) use of a validated questionnaire for the Portuguese population.

## Conclusions

The practice of physical activity is influenced by a vari-

ety of motivational factors, which can vary significantly according to the individual characteristics of each person. These motivational factors are often organized into different dimensions, reflecting the diverse reasons why people engage in physical activities.

Although this study analyzes data from a population at a single point in time, the presented sample is not representative of the population, therefore, it cannot accurately describe its features.

The factors that most motivate the individuals of the present study are grouped into "Well-being," "Health," "Stress Control," and "Appearance/Aesthetics" dimensions. Conversely, the factors that least motivate are grouped into the dimensions of "Personal Appreciation" and "Medical History".

A common dimension of motivation is the pursuit of overall well-being and health. Many people are motivated to exercise to improve their physical health and promote a healthier lifestyle. Others may be driven by the pursuit of specific benefits, such as gaining muscle strength or increasing endurance.

Additionally, aesthetics and appearance factors also play an important role in motivation for physical activity practice. For some, concern about body image and the desire to achieve certain beauty standards can be powerful drivers for regularly exercising.

Age, marital status, and gender were found to be motivational factors' determinants for exercise practice in the context of a Health Club. Younger and single individuals value the "Appearance/Aesthetics" dimension, while older and married individuals value the "Personal Appreciation" dimension. Women attach more importance to the "Physical Condition" dimension.

On the other hand, psychosocial factors such as the pursuit of social connections and a sense of belonging to a group can also play a significant role in motivation for physical activity practice. Engaging in physical activities in groups or teams can provide a sense of belonging and mutual support, which can increase motivation to exercise.

Despite the prudence required in the stated inferences, limited by the sample size, we believe that the perception of these variables constitute a strong foundation for improving.

To further explore these issues, it would be beneficial to conduct additional research with a more extensive and diverse sample, therefore, in future studies, we suggest collecting data from a larger sample focused on several Health Clubs in the interior of Portugal.

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## References

- Ascensão, R. (2012). *Motivação para a prática de exercício físico em Ginásios do distrito de Castelo Branco*. [Dissertação de Mestrado não publicada]. Repositório Institucional do Instituto Politécnico de Castelo Branco.
- Azevedo, A., Eira, P. & Pereira, A. (2021). Desporto: espaço de formação, motivação e bem-estar. Estudo com jovens praticantes de natação. *Millenium*, 2(9), 227-239.
- Bento, J. (1995). *O outro lado do desporto*. Campo das Letras.
- Bento, J. (2012). Pelo regresso do Desporto: ensaio epistemológico. In J. O. Bento & W. Moreira (Orgs.). *Homo Sportivus. O Humano no Homem* (pp. 104-111). Instituto Casa da Educação Física.
- Bermejo, J. P., Almagro, B. J., & Rebollo, J. A. (2018). Factores motivacionales relacionados con la intención de seguir practicando ejercicio físico en mujeres adultas (Motivational factors related to the intention to continue practicing exercise in adult women). *Retos*, 34, 117-122. <https://doi.org/10.47197/retos.v0i34.50748>
- Buckworth, J., & Dishman, R. (2002). *Exercise Psychology*. Human Kinetics.
- Campos, F., Martins, F., Gomes, R., Zylberberg, T., Mendes, S., & Damásio, A. (2021). Importancia atribuida en el fitness de acuerdo con el ingreso mensual de los practicantes (The importance given in fitness according to the participants income). *Retos*, 40, 336-343. <https://doi.org/10.47197/retos.v1i40.81957>
- Cid, L., Monteiro, D., Teixeira, D., Evmenenko, A., Andrade, A., Bento, T., Vitorino, A., Couto, N., & Rodrigues, F. (2022). Assessment in Sport and Exercise Psychology: Considerations and Recommendations for Translation and Validation of Questionnaires. *Frontiers in Psychology*, 13: 806176. <https://doi.org/10.3389/fpsyg.2022.806176>
- Ciríaco, P. (2021). Entre Popper e Morin: reflexões epistemológicas para a teoria do desenvolvimento. *Conpedi Law Review*, 7(21), 95-109. DOI:10.26668/2448-3931\_conpedilawreview/2021.v7i1.7880.
- Dasso, N. (2019). How is exercise different from physical activity? A concept analysis. *Nursing forum*, 54(1), 45-52. <https://doi.org/10.1111/nuf.12296>.
- Deelen, I., Ettema, D., & Kamphuis, C. (2018). Sports participation in sport clubs, gyms or public spaces: How users of different sports settings differ in their motivations, goals, and sports frequency. *PLoS One*, 13(10), e0205198. <https://doi.org/10.1371/journal.pone.0205198>
- European Commission (2018). *Special Eurobarometer 472 Report: Sport and physical activity*. [https://sport.ec.europa.eu/sites/default/files/special-eurobarometer-472\\_en.pdf](https://sport.ec.europa.eu/sites/default/files/special-eurobarometer-472_en.pdf).
- Fleury, J., & Lee, S. M. (2006). The social ecological model and physical activity in African American women. *American journal of community psychology*, 37(1-2), 129-140. <https://doi.org/10.1007/s10464-005-9002-7>
- Gjestvang, C., Abrahamsen, F., Stensrud, T., & Haakstad, L. (2020). Motives and barriers to initiation and sustained exercise adherence in a fitness club setting-A one-year follow-up study. *Scandinavian journal of Medicine & Science in Sports*, 30(9), 1796-1805. <https://doi.org/10.1111/sms.13736>.
- Hair, J., Babin, B., Anderson, R., & Black, W. (2019). *Multivariate Data Analysis* (8th ed). Pearson Educational.
- Hull, E. E., Rofey, D. L., Robertson, R. J., Nagle, E. F., Otto, A. D., & Aaron, D. J. (2010). Influence of marriage and parenthood on physical activity: a 2-year prospective analysis. *Journal of physical activity & health*, 7(5), 577-583. <https://doi.org/10.1123/jpah.7.5.577>
- IHRSA (2019). *The IHRSA Global Report: the state of Health Club industry*. IHRSA.
- King, A. C., Kiernan, M., Ahn, D. K., & Wilcox, S. (1998). The effects of marital transitions on changes in physical activity: results from a 10-year community study. *Annals of behavioral medicine*, 20(2), 64-69. <https://doi.org/10.1007/BF02884450>
- Lally, P., & Gardner, B. (2013). Promoting habit formation. *Health Psychology Review*, 7(1), 137-158. <https://doi.org/10.1080/17437199.2011.603640>.
- Larsen, S., Mozdoorzoy, T., Kristiansen, E., Nygaard Falch, H., Aune, T., & Van Den Tillaar, R. (2021). A Comparison of Motives by Gender and Age Categories for Training at Norwegian Fitness Centers. *Sports (Basel, Switzerland)*, 9(8), 113. <https://doi.org/10.3390/sports9080113>.
- Markland, D., & Ingledew, D. K. (1997). The measurement of exercise motives: Factorial validity and invariance across gender of a revised Exercise Motivations Inventory. *British Journal of Health Psychology*, 2, 361-376. <https://doi.org/10.1111/j.2044-8287.1997.tb00549.x>.
- Marôco (2018). *Análise Estatística com o SPSS Statistics* (7ª ed.). ReportNumber.
- Morris, T., & Roychowdhury, D. (2020). Physical activity for health and wellbeing: the role of motives for participation. *Health Psychology Report*, 8(4), 391-407. <https://doi.org/10.5114/hpr.2020.100111>.
- Moutão, J. (2005). *Motivação para a prática de exercício físico: estudo dos motivos para a prática de atividades de fitness em Portugal*. [Dissertação de Mestrado não publicada]. Repositório Científico da Universidade de Trás-os-Montes e Alto Douro.
- Moutão, J., Louro, H., Cid, L., & Alves, S. (2012). Motivos para a prática de atividades de fitness em contexto de ginásio e piscina. *Lecturas: Educación Física y Deportes*, 169. <http://hdl.handle.net/10400.15/3588>.
- Mullen, S., & Whaley, D. (2010). Age, gender, and fitness club membership: Factors related to initial involvement and sustained participation. *International Journal of Sport Exercise and Psychology*, 8(1), 24-35.

- <https://doi.org/10.1080/1612197X.2010.9671931>.
- Pedersen, M., Hansen, A., & Elmoose-Osterlund, K. (2021). Motives and barriers related to physical activity and sport across social backgrounds: implications for health promotion. *International Journal of Environmental Research and Public Health*, 18(11), 5810. <https://doi.org/10.3390/ijerph18115810>.
- Pedragosa, V., Cardadeiro, E., & Santos, A. (2022). *Barómetro do Fitness: Relatório Anual. Portugal Activo*. <https://www.portugalactivo.pt/documentacao-para-download>.
- Phillips, S., Cadmus-Bertram, L., Rosenberg, D., Buman, M., & Lynch, B. (2018). Wearable Technology and Physical Activity in Chronic Disease: Opportunities and Challenges. *American Journal of Preventive Medicine*, 54(1), 144-150.
- Riseth, L., Nøst, T., Nilsen, T., & Steinsbekk, A. (2019). Long-term members' use of fitness centers: a qualitative study. *BMC Sports Science, Medicine & Rehabilitation*, 11(2). <https://doi.org/10.1186/s13102-019-0114-z>.
- Rivera-Torres, S., Fahey, T. D., & Rivera, M. A. (2019). Adherence to Exercise Programs in Older Adults: Informative Report. *Gerontology and Geriatric Medicine*, 5. <https://doi.org/10.1177/2333721418823604>.
- Rodrigues, F., & Monteiro, D. (2021). *Mudança Comportamental em Atividade Física e Saúde*. Centro de Investigação em Qualidade de Vida. <https://www.cieqv.pt/wp-content/uploads/2022/01/mudanca-comportamental-emafs.pdf>.
- Rodrigues, F., Monteiro, D., Teixeira, D., & Cid, L. (2020). O papel dos instrutores de fitness na adesão à prática de exercício físico em Portugal: a importância dos comportamentos de suporte e dos climas motivacionais. *Motricidade*, 16(4), 420-431. <https://doi.org/10.6063/motricidade>.
- Rodrigues, F., Moutão, J., Teixeira, D., Cid, L., & Monteiro, D. (2022). Examining exercise motives between gender, age and activity: A first-order scale analysis and measurement invariance. *Current Psychology*, 41, 112–125. <https://doi.org/10.1007/s12144-019-00560-y>.
- Sallis, J. F., Owen, N., & Fisher, E. B. (2015). Ecological models of health behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health Behavior: Theory, Research, and Practice* (5th ed., pp. 43-64). Jossey-Bass.
- Silva, M., Markland, D., Carraça, E., Vieira, P., Coutinho, S., Minderico, C., & Teixeira, P. (2011). Exercise Autonomous Motivation Predicts 3-yr Weight Loss in Women. *Medicine & Science in Sports & Exercise*, 43(4), 728-737.
- Sun, H., Vámos, C., Flory, S., DeBate, R., Thompson, E., & Bleck, J. (2017). Correlates of long-term physical activity adherence in women. *Journal of Sport and Health Science*, 6(4), 434–442. <https://doi.org/10.1016/j.jshs.2016.01.009>.
- Tsitskari, E., & Batrakoulis, A. (2022). Investigar las estrategias de marketing del sector de la salud y el fitness en Grecia; la perspectiva de los gerentes (Investigating the marketing strategies of the health and fitness sector in Greece; the managers' perspective). *Retos*, 43, 264–273. <https://doi.org/10.47197/retos.v43i0.88880>
- Ulseth, A. (2008) New opportunities. Complex motivations: gender differences in motivation for physical activity in the context of sports clubs and fitness centers. *IJAASS*, 20(1), 44-66.
- Wang, X., & Cheng, Z. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. *Chest*, 158(1S), S65–S71. <https://doi.org/10.1016/j.chest.2020.03.012>
- Zeng, N., Ayyub, M., Sun, H., Wen, X., Xiang, P., & Gao, Z. (2017). Effects of Physical Activity on Motor Skills and Cognitive Development in Early Childhood: A Systematic Review. *Biomed Research International*, 1-13. <https://doi.org/10.1155/2017/2760716>.

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