

# PODIUM

Journal of Science and Technology in Physical Culture

UNIVERSITY EDITORIAL

Volumen 17  
Issue 3

2022

University of Pinar del Río "Hermanos Saíz Montes de Oca"

Director: Fernando Emilio Valladares Fuente

Email: [fernando.valladares@upr.edu.cu](mailto:fernando.valladares@upr.edu.cu)

Translated from the original in Spanish

Original article

## Motivation towards the practice of physical activities in assistants of the gerontological center "Las Piñas" of the Milagro Canton

## Motivación hacia la práctica de actividades físicas en asistentes del centro gerontológico las Piñas del Cantón Milagro

## Motivação para a prática de atividades físicas nos participantes do centro gerontológico Las Piñas, no cantão de Milagro

Verónica Janeth Vaca Catute<sup>1\*</sup>  <https://orcid.org/0000-0002-1315-2535>

Fernando Alfonso Cedeño Alejandro<sup>2</sup>  <https://orcid.org/0000-0002-8973-9834>

<sup>1</sup>University of Guayaquil. Ecuador.

\*Corresponding author: veronica.vacac@ug.edu.ec

**Received:** 2022/04/25.

**Approved:** 2022/06/22.

How to cite item: Vaca Catute, V., & Cedeño Alejandro, F. (2022). Motivación hacia la práctica de actividades físicas en asistentes del centro gerontológico las Piñas del Cantón Milagro /Motivation towards the practice of physical activities in assistants of the gerontological center "Las Piñas" of the Milagro Canton. *PODIUM - Revista de Ciencia y Tecnología en la Cultura Física*, 17(3), 961-973. Recuperado de <https://podium.upr.edu.cu/index.php/podium/article/view/1349>

### ABSTRACT

**Introduction:** Motivation allows the individual to stay in a given action, enables the effectiveness of pertinent processes for the achievement of a specific or general objective, which in the case of physical activity is related to its systematicity and, therefore, the maintenance of a better lifestyle.

**Objective:** The research focused on diagnosing the motivation towards the practice of



physical activities in Assistants of the "Las Piñas" Gerontological Center of the Milagro Canton.

**Materials and methods:** The methodology used responds to a descriptive-explanatory research, of a qualitative nature. With a type of non-probabilistic sampling, 60 older adults are studied as a participating population, classified by gender. An adapted research instrument was used, applying the Rossemberg *test* as a basis and a valid survey for the measurement of the two variables.

**Results:** The results of the research determined that there is a high percentage of adults who are sedentary, in relation to gender it was found that women have a higher rate of inactivity than men, without significant differences ( $p=0.982$ ). Another response found is that many older adults find the perception of not being able to keep up with others, illnesses, fear of injury, among others, as limitations to physical activity, being variables of consideration in the prospective design of a strategy playful to improve the quality of life of the samples under study.

**Conclusions:** As part of the conclusions, it is suggested that changes be made in the lifestyle of the older adults studied, the main thing is the motivation that can be instilled in them from home and from families.

**Keywords:** Motivation; Older adults; Physical activity; Sedentary lifestyle; Diseases; Inactivity.

---

## RESUMEN

**Introducción:** La motivación le permite al individuo mantenerse en una acción determinada, posibilita la efectividad de procesos pertinentes para el logro de un objetivo específico o general, que para el caso de la actividad física se relaciona con su sistematicidad, y por ende, la mantención de un mejor estilo de vida.

**Objetivo:** La investigación se centró en diagnosticar la motivación hacia la práctica de actividades físicas en Asistentes del Centro Gerontológico Las Piñas Del Cantón Milagro.

**Materiales y métodos:** La metodología utilizada responde a una investigación descriptiva-explicativa, de orden cualitativo. Con un tipo de muestreo no probabilístico, se estudia a 60 adultos mayores como población participante clasificados en géneros. Se trabajó con un instrumento de investigación adaptado, se aplica al test de Rossemberg como base, y una encuesta válida para la medición de las dos variables.

**Resultados:** Los resultados de la investigación determinaron que existe un alto porcentaje de los adultos que se encuentran sedentarios, en relación al género se encontró que las mujeres tienen mayor índice de inactividad que los hombres, sin diferencias significativas ( $p=0.982$ ). Otra respuesta encontrada es que muchos adultos mayores encuentran como limitantes de la actividad física la percepción de no poder ir al ritmo de los demás, las enfermedades, el miedo a las lesiones, entre otras, siendo variables de consideración en el diseño prospectivo de una estrategia lúdica para mejorar la calidad de vida de las muestras objeto de estudio.

**Conclusiones:** como parte de las conclusiones se sugieren que se realicen modificaciones en el estilo de vida que llevan los adultos mayores estudiados, lo principal es la motivación que se les puede inculcar desde el hogar y desde las familias.

**Palabras clave:** Motivación; Adulto mayor; Actividad física; Sedentarismo; Enfermedades; Inactividad.



## SÍNTESIS

**Introdução:** A motivação permite ao indivíduo permanecer em uma determinada ação, torna possível a eficácia dos processos pertinentes para a realização de um objetivo específico ou geral, que no caso da atividade física está relacionada à sua sistemática e, portanto, à manutenção de um estilo de vida melhor.

**Objetivo:** A pesquisa se concentrou no diagnóstico da motivação para a prática de atividades físicas nos assistentes do Centro Gerontológico Las Piñas, no Cantão de Milagro.

**Materiais e métodos:** A metodologia utilizada foi descritiva-explicativa, pesquisa qualitativa. Usando um método de amostragem não-probabilístico, 60 adultos mais velhos foram estudados como a população participante, classificada por gênero. Trabalhamos com um instrumento de pesquisa adaptado, aplicando o teste de Rossemberg como base, e uma pesquisa válida para medir as duas variáveis.

**Resultados:** Os resultados da pesquisa determinaram que existe uma alta porcentagem de adultos sedentários, em relação ao gênero, verificou-se que as mulheres têm uma taxa de inatividade maior que os homens, sem diferenças significativas ( $p=0,982$ ). Outra resposta encontrada é que muitos adultos mais velhos acham que a percepção de não conseguir acompanhar os outros, doenças, medo de lesões, entre outros, são fatores limitantes para a atividade física, que são variáveis a serem consideradas no projeto prospectivo de uma estratégia recreativa para melhorar a qualidade de vida das amostras em estudo.

**Conclusões:** Como parte das conclusões, sugere-se que sejam feitas modificações no estilo de vida dos adultos mais velhos estudados, sendo o principal a motivação que pode ser inculcada neles em casa e em suas famílias.

**Palavras-chave:** Motivação; Idosos; Atividade física; Estilo de vida sedentário; Doenças; Inatividade.

## INTRODUCTION

Motivation is "a fundamental aspect in the learning of any person, whose objective is to achieve a high level of performance through stimuli or punishment, which is manifested through the internal personality of the person" (Zanabria, 2020; La Rosa Arias *et al.*, 2021).

Man seeks to satisfy his primary needs, that is why he must be motivated to act, make an effort where he asks and ask himself to reach the highest point, in order to obtain results greater than what he expected. Motivation is an aspect of human psychology, which has a direct relationship with human behavior, that is, motivation is what drives an individual to work towards an objective (Rhodes *et al.*, 2019; Marshall & Paterson, 2020). As such, any activity can still be an exhausting process, as long as there is no interest in doing an activity.

The application of motivation theory in different spaces of daily life, such as physical activity, can help understand what behaviors facilitate or hinder adherence to a healthy lifestyle (Calero *et al.*, 2016; Pileta *et al.*, 2019). According to Cruz (2018), the interaction of Maslow's theory and the Self-Determination Theory (SDT) have been carefully observed in recent decades, which are currently among the most consistent and firm theoretical constructions that describe human motivation, more precisely related to sport/motivation.



Abraham Maslow's theory is based on a sequence, from the most primitive to the highest needs, which interact in different spaces with the growth and personal fulfillment of the subject (Cruz, 2018).

The theory assumes that everyone has a hierarchy of five needs:

1. Physiological: "such as food, water, ideal temperature, wind, rest, etc., to keep the human body in a state of balance" (p.21).
2. Stability: "such as personal security, no threats, etc. The human body needs to be protected from danger" (p.21).
3. Social: "such as family, social ties, relationships, love, etc. The need for attention and socialization is one of the main needs in this category, since this person generally wants to have affective interactions with people and a respectable position in general" (p.21).
4. Self-esteem: "Self-esteem and external approval, I want self-esteem, power, achievement, adequacy, wisdom and ability, confidence in the well-being of all, and freedom and independence. It also includes the desire to gain fame, prestige, respect and respect from others" (p.21).
5. Self-realization: "how to become who you can be on an ongoing basis. It refers to the need that self-actualizing people feel, the tendency to keep up with their current underlying situation" (p.21).

This theory rescues the fact that as soon as one of these needs is important (although not completely satisfied), it stops motivating and becomes the next highest in the hierarchy of motivations, but a higher need will not work (Kwaœna & Jaworski, 2018).

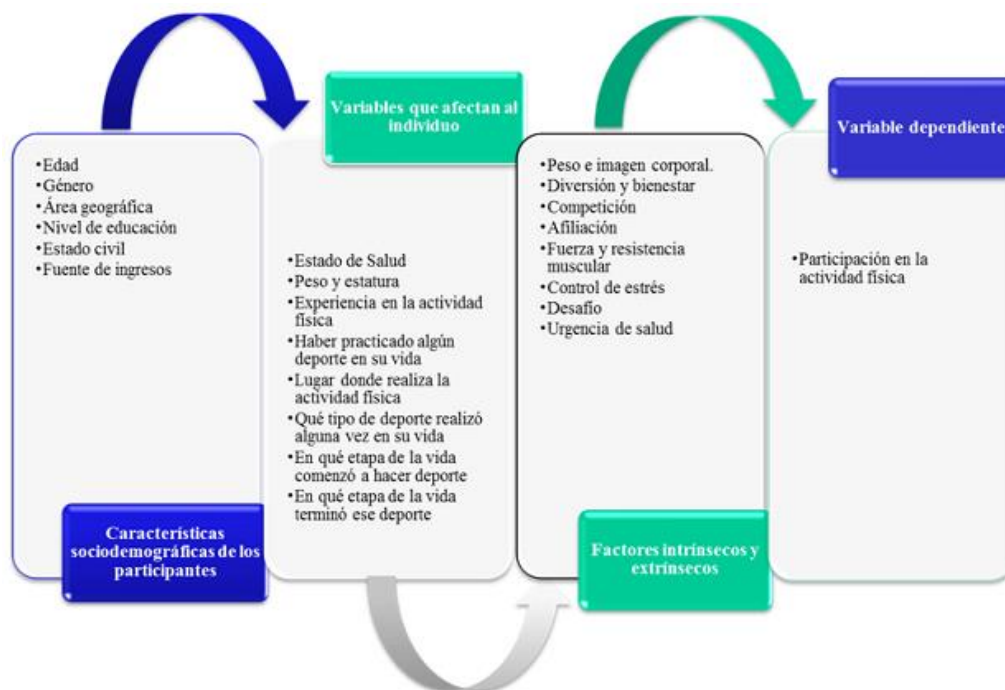
It must be recognized that everyone's needs are different, so no single program can be used to dictate that everyone perform a given task. In demand planning, the differences that can be expected will be as great as the differences between people in terms of interests, skills and capacity of responsiveness (Gómez López & Fernández Campoy, 2020; Petry & de Jong, 2022). In fact, some needs became stronger than others due to previous experiences, gratifications, and frustrations in the subjects' lives (Pereira *et al.*, 2018). For Maslow, according to La Rosa Arias (2021), incentives should be used proportionally, which are normally related to money, stability, affiliation, respect and self-realization.

Psychological needs serve as precursors to self-motivation, the integration of personality and the environment (Flores Bernal *et al.*, 2019; Jerez *et al.*, 2022). Likewise, it explains to what extent individuals become aware of their profession and then voluntarily incorporate it into their lifestyle (Cruz, 2018). According to the criteria of the aforementioned author, there are sub-theories that support the behavior of agents in motivated behavior. However, for analytical purposes, it will be considered as an allusion "the theory of organic integration, conceptualizing the components of intrinsic and extrinsic motivation in older adults to integrate physical activity into their lifestyles (Gilal *et al.*, 2020).



Moving from one type of behavior to another encompasses three fundamental types of motivation: amotivation, extrinsic motivation, and intrinsic motivation. All types of motivations have their own composition and are regulated internally or externally by the individual; hence they are usually study indicators of motivation towards the practice of physical activity (da Silva *et al.*, 2019; Barreto *et al.*, 2021).

The classification of self-reported motivational components of motivation to practice physical exercise is divided into intrinsic and extrinsic components. Figure 1 shows the Causation Model of the intrinsic and extrinsic motivational factors (Figure 1).



**Fig. 1.-** Causality model of intrinsic and extrinsic motivational factors

The model shows independent changes in the sociodemographic characteristics of the competitors (age, gender, geographic region, educational level, marital status and source of income); independent changes that affect the individuals (state of health, weight and height, experience in physical activity), practice any sport in their history, where they practiced physical activity, what type of sport they practiced at a certain stage of their life, at what stage of his life began to practice sport, at what stage of his life did he end the sport), intrinsic and extrinsic components and dependent variables that involve the collaboration of physical activity, as predetermined in this analysis to answer conjectures that improve.

Authors such as Pereira *et al.* (2018) indicate that, in the older adults, the biggest problem of physical inactivity is caused by a sedentary lifestyle, caused by advancing age and also determined by the environment in which the older adult operates. There are cases where it has been observed that older adults who have maintained a healthy rhythm of life, doing physical activity regularly, their health status is much better, they feel motivated, have an excellent cardiorespiratory rhythm and diseases take time to appear, unlike of the groups of older adults who spend the most time physically inactive. Due to sedentary lifestyle, older adults are candidates to suffer from problems of obesity,



diabetes and other opportunistic diseases that deteriorate their general condition, both physical and health.

In this sense, the purpose of the research is to diagnose the motivation towards the practice of physical activities in assistants of the "Las Piñas" Gerontological Center, of the Milagro Canton, in the Republic of Ecuador, laying the theoretical and methodological bases to prospectively establish actions systematizing the practice of general and specialized physical activities and, therefore, raising the quality of life of the older adult under study.

## **MATERIALS AND METHODS**

For the present study, descriptive-explanatory research was applied, with a fundamentally qualitative basis, selected with a non-probabilistic intentional sampling of 60 older adults belonging to the "Las Piñas" Gerontological Center, located in the Milagro Canton, belonging to the Province of Guayas, Republic of Ecuador.

The bibliographic information was taken from different reliable sources of previous data considered by various authors mentioned above, which refer to the motivation towards the practice of physical activities in older adults. It was established to apply an adequate instrument to establish the number of older adults who are sedentary and those who practice some physical activity.

A focus group was carried out, divided into two days, the first in the evening, where a group of 60 older adults between 65 and 75 years of age were worked with and in the morning session two groups were subdivided, due to the fact that at that time a greater influx than in the afternoon. The instrument was based on the Rossemberg *Test*, which was initially proposed to measure the current state of self-esteem, adapted to the variables of motivation towards physical activity. The classification of the results by gender was compared with the Calculation of Proportions for Independent Samples ( $p=0.05$ ).

To expose the main data that was taken into consideration in the focus groups, such as Presence or not of a sedentary lifestyle, Autonomous Motivation towards physical activity (intrinsic), Controlled Motivation (extrinsic) and No presence of motivation for physical activity.

## **RESULTS**

According to the results related to physical activity and sedentary lifestyle (Table 1), it was found that, in the male gender, 31 % are active (direct relationship or not with sedentary lifestyle), which means that this group responded in the focus group that exercises regularly, such as going for walks, performs physical activity of any kind, both inside and outside the gerontological center.

On the other hand, 69 % indicated that they do not carry out any type of activity (Table 1), so they are considered to be sedentary. In relation to the female gender, 33 % indicated feeling active in relation to physical exercise and 77 % are sedentary. Percentage-wise, there are no notable differences regarding the type of gender and the



physical activity of each group ( $p=0.982$ ); in men, it influences the participation of feeling active and doing any sport without any type of restriction or limitation; On the other hand, in the female gender, the activities related to daily life influence, such as, for example, some comments that were heard in the focus group were related to the impediment of physical activity and household chores, children, diseases and also the null predisposition to exercise.

**Table 1.** -Description of the characteristics of the participants of the focus groups, based on physical and sedentary activity

Alternatives _	Male		Feminine	
	F	P	F	P
<b>Active</b>	11	31%	8	33%
<b>sedentary</b>	25	69%	16	67%
<b>Total</b>	36		24	

In relation to autonomous or intrinsic and extrinsic motivation (Table 2), in the male gender, 14 % affirm doing it for fun, this is related to older adults who practice some specialized physical activity, including sports, for example, the Volleyball and Soccer adapted to age; consequently, there is 11 % who do sports for health, 19 % do it to feel active and 56% do not have motivation for general or specialized physical activity.

In relation to the female gender (Table 2), 21 % say they do it for fun, it should be noted that the favorite sport of this population is soccer, followed by basketball; 21 % do it for health or medical recommendation, according to the question about health problems that require physical activity, most indicate that it is related to weight, heart disease and diabetes; 17 % do physical activity to feel active and 42 % have no motivation to do this type of activity.

**Table 2.** - Description of the characteristics of the participants in the focus groups, based on intrinsic motivation

ALTERNATIVES	Male		Feminine	
	F	P	F	P
<b>Fun</b>	5	14%	5	21%
<b>Health</b>	4	11%	5	21%
<b>Feel active</b>	7	19%	4	17%
<b>Personal growth</b>	0	0%	0	0%
<b>Has no motivation for physical activity</b>	20	56%	10	42%
<b>Total</b>	36		24	

In the same way, information was extracted in relation to the causes of the lack of motivation to perform physical activity (Table 3); The male focus group responded that among the causes with the highest incidence are lack of interest (15 %), not being able to keep up with others (25 %), either due to a problem of physical or mental limitation (10 %) or excessive difficulty (5 %), fear of injury (5 %), not feeling competent (25 %), feeling ashamed (5 %), and ineffective time management.





In the female gender, they are made up of the same causes (Table 3), considering that ineffective management, time (20 %) as well as lack of interest (20 %) and physical and mental limitations (20 %) are They relate to health problems that in a certain way affect the performance of physical activities.

**Table 3.-** Description of the characteristics of the participants in the focus groups, based on the causes of the lack of motivation for physical activity

ALTERNATIVES	Male		Feminine	
	F	P	F	P
Lack of interest	3	15%	2	20%
Boredom	2	10%	1	10%
Not being able to keep up with others	5	25%	1	10%
Not feeling competent	2	10%	0	0%
Shame	1	5%	0	0%
Physical and mental limitations	2	10%	2	20%
Excessive difficulty in physical activity	1	5%	1	10%
Fear of injury	1	5%	1	10%
Laziness	0	0%	0	0%
ineffective time management	3	15%	2	20%
Total	20		10	

## DISCUSSION

According to the author [García \(2021\)](#), the motivation towards physical activity in the older adult should be stimulated not only to the individual as such, but also to the relatives who live with him, because it is considered very important because it is good for health. health in various ways, in addition to the fact that exercise can range from walking to work to participating in a team of your favorite sport, that is, it can be adapted to the style of each person and needs, hence the importance of previously establishing diagnoses that determine tastes and preferences ([Calero et al., 2016](#); [Dedeyne et al., 2018](#)).

While [Arias \(2021\)](#) indicates that, for older adults, physical activities should consist of recreational activities that combine daily activities with low-impact exercises; ([Alarcón & Abensur, 2020](#)) such as, for example, modifying certain routines regarding mobilization as was carried out in the present investigation, by modifying sports such as volleyball and soccer based on the real possibilities of the sample. studied, since adequate physical conditioning can ensure a good quality of life at this stage of life ([La Rosa Arias et al., 2021](#)).



For older adults, the ideal is to develop physical activity to improve cardiorespiratory and muscular function, (Hurst *et al.*, 2019) and to help prevent or delay cognitive decline, (Mencías *et al.*, 2016; Mera *et al.*, 2018; Mercedes *et al.*, 2017) among others. According to the results obtained in this research, 150 minutes of any type of aerobic exercise, or 75 minutes of vigorous physical activity per week are recommended for adults over 65 years of age, which would be beneficial if performed in the company of a family member, given the existence of a positive correlation between free time and family relationships (Talavera Morales *et al.*, 2018).

According to the findings found, it is noted that the population of older adults, as the years go by, decreases physical activity, predisposing them to non-communicable diseases. It is defined as a problem in which several causes influence, for example, in the case of women, several of the answers found are related to physical inactivity, since they have to divide their time between household chores, caring for family or because they do not like or are not motivated towards physical exercise.

In the case of men, it constitutes causes such as fear of injury, lack of motivation from the environment, illnesses, lack of interest, the perception of feeling overwhelmed by not being able to exercise at the same pace as others and the lack of family accompaniment predisposes not to perform physical activity and to incur a sedentary lifestyle.

For the present research, it is necessary to establish playful strategies in accordance with the likes, preferences and needs of the population under study, with a view to raising the motivation indexes towards the practice of general and specialized physical activity, adapting the contents to the requirements physical characteristics of each member to be studied, (Calero Morales *et al.*, 2019). Said purpose is considered a prospective objective to perfect in the future the practice and systematization of physical activities in the assistants of the "Las Piñas" Gerontological Center of the Milagro Canton.

## CONCLUSIONS

As part of the conclusions, it is suggested that changes be made in the lifestyle of the older adults studied, the main thing is the motivation that can be instilled in them from home and from families. Several studies suggest that if routines are changed, physical activity can be achieved indirectly, for example, if they do not have health problems associated with walking, they can change their mobilization, take nearby walks, do light aerobic exercises, dance therapy, among other low-impact activities that do not generate any type of injury and force.

## REFERENCES

- Alarcón, R., & Abensur, C. (2020). Actividad física subaeróbica de bajo impacto: una estrategia para disminuir el deterioro del sistema muscular y mejorar la calidad de vida en personas de la tercera edad, en los (cpr) distrito de Pachacamac. *Ciencia y Desarrollo*, 23(2), 43-50. <https://doi.org/10.21503/cyd.v23i2.2090>



- Barreto, B. S., Moura, I. V., de Sousa Pinheiro, G., de Andrade, A. G., Noce, F., & da Costa, V. T. (2021). Analysis of the Motivational Levels of Men and Women Amateur Runners. *Lecturas: Educación Física y Deportes*, 26(282), 59-75. <https://doi.org/10.46642/efd.v26i282.2671>
- Calero Morales, S., Garzón Duque, B. A., & Chávez Cevallos, E. (2019). La corrección-compensación en niños sordociegos con alteraciones motrices a través de actividades físicas adaptadas. *Revista Cubana de Salud Pública*, 45(4), 1-14. 10 de noviembre de 2021. <http://www.revsaludpublica.sld.cu/index.php/spu/article/view/1344/1337>
- Calero, S., Klever, T., Caiza, M. R., Rodríguez, Á. F., & Analuiza, E. F. (2016). Influencia de las actividades físico-recreativas en la autoestima del adulto mayor. *Revista Cubana de Investigaciones Biomédicas*, 35(4), 366-374. 16 de noviembre de 2021. [http://scielo.sld.cu/scielo.php?pid=S0864-03002016000400007&script=sci\\_arttext&tIng=pt](http://scielo.sld.cu/scielo.php?pid=S0864-03002016000400007&script=sci_arttext&tIng=pt)
- da Silva, F. L., dos Santos, K. A., Lopes, J. M., & de Sousa, L. A. (2019). Motivação para a prática de atividade física em idosos do município de Canindé, Ceará. *Lecturas: Educación Física y Deportes*, 24(256), 59-71. 16 de noviembre de 2021. <https://www.efdeportes.com/efdeportes/index.php/EFDeportes/article/view/1004/917>
- Dedeyne, L., Dewinter, L., Lovik, A., Verschueren, S., Tournoy, J., & Gielen, E. (2018). Nutritional and physical exercise programs for older people: program format preferences and (dis)incentives to participate. *Clinical interventions in aging*, 13, 1259. <https://doi.org/10.2147/CIA.S159819>
- Flores Bernal, R., Matheu Pérez, A., Juica Martínez, P., Barrios Queipo, E. A., & Mejías Zamora, B. (2019). Análisis de género de clases de la autodeterminación del rendimiento y la motivación en clase de Educación Física. *Revista Cubana de Investigaciones Biomédicas*, 38(2), 27-44. 19 de noviembre de 2021. [http://scielo.sld.cu/scielo.php?pid=S0864-03002019000200027&script=sci\\_arttext&tIng=pt](http://scielo.sld.cu/scielo.php?pid=S0864-03002019000200027&script=sci_arttext&tIng=pt)
- Gilal, F. G., Zhang, J., Gilal, R. G., & Gilal, N. (2020). Linking motivational regulation to brand passion in a moderated model of customer gender and age: an organismic integration theory perspective. *Managerial Science*, 14(1), 87-113. <https://doi.org/10.1007/s11846-018-0287-y>
- Gómez López, N., & Fernández Campoy, J. M. (2020). Las metodologías didácticas innovadoras como estrategia para afrontar los desafíos educativos del siglo XXI. Madrid: Dykinson. <https://www.jstor.org/stable/j.ctv153k54t>
- Hurst, C., Weston, K. L., & Weston, M. (2019). The effect of 12 weeks of combined upper-and lower-body high-intensity interval training on muscular and cardiorespiratory fitness in older adults. *Aging clinical and experimental research*, 31(5), 661-671. <https://doi.org/10.1007/s40520-018-1015-9>
- Jerez, N. B., Merino, A. M., & Gómez, F. G. (2022). Diagnóstico de la motivación para la incorporación del adulto mayor masculino a las actividades físicorecreativas. *Revista científica Olimpia*, 19(1), 349-361. 21 de enero de 2022. <https://revistas.udg.co.cu/index.php/olimpia/article/view/2977>



- Kwaœena, A., & Jaworski, K. (2018). Motivation behind participation in swimming classes in the hierarchy of values of adults. *Science in Swimming*, 7, 43-53. 15 de noviembre de 2021, [https://awf.wroc.pl/files\\_mce/INNE%20JEDNOSTKI/Wydawnictwo%20AWF/ScienceSwimming /Science\\_7.pdf#page=43](https://awf.wroc.pl/files_mce/INNE%20JEDNOSTKI/Wydawnictwo%20AWF/ScienceSwimming /Science_7.pdf#page=43)
- La Rosa Arias, M., Zaldívar Castellanos, L. A., Martínez González, O., & Gordo Gómez, Y. M. (2021). Juegos para elevar la motivación hacia la actividad física en adultos mayores. *Podium. Revista de Ciencia y Tecnología en la Cultura Física*, 16(2), 436-450. 18 de noviembre de 2021. [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1996-24522021000200436](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1996-24522021000200436)
- Marshall, S., & Paterson, L. (2020). *La mente del deportista: Estrategias para desarrollar confianza y motivación en el deporte*. Barcelona: Paidotribo. [https://books.google.com/cu/books/about/La\\_mente\\_del\\_deportista.html?id=JVSRDwAAQBAJ&source=kp\\_book\\_description&redir\\_esc=y](https://books.google.com/cu/books/about/La_mente_del_deportista.html?id=JVSRDwAAQBAJ&source=kp_book_description&redir_esc=y)
- Mencías, J. X., Ortega, D. M., Zuleta, C. W., & Calero, S. (enero de 2016). Mejoramiento del estado de ánimo del adulto mayor a través de actividades recreativas. *Lecturas: Educación Física y Deportes*, 20(212), 1-13. 17 de noviembre de 2021. <https://www.efdeportes.com/efd212/estado-de-animo-del-adulto-mayor.htm>
- Mera, M. A., Morales, S., & García, M. R. (2018). Intervención con actividad físico-recreativa para la ansiedad y la depresión en el adulto mayor. *Revista Cubana de Investigaciones Biomédicas*, 37(1), 1-11. 12 de enero de 2022. <http://www.revibiomedica.sld.cu/index.php/ibi/article/view/95>
- Mercedes, M., Álvarez, J. C., Guallichico, P. A., Chávez, P., & Romero, E. (2017). Entrenamiento funcional y recreación en el adulto mayor: influencia en las capacidades y habilidades físicas. *Revista Cubana de Investigaciones Biomédicas*, 36(4), 1-13. 18 de noviembre de 2021. <http://www.revibiomedica.sld.cu/index.php/ibi/article/view/22>
- Pereira, L. G., Fernández, E. B., Cruz, M. G., & Santiesteban, J. R. (2018). Programa de actividad física y su incidencia en la depresión y bienestar subjetivo de adultos mayores. *Retos: nuevas tendencias en educación física, deporte y recreación*, 33, 14-19. 18 de noviembre de 2021. <https://recyt.fecyt.es/index.php/retos/article/view/49638>
- Petry, K., & de Jong, J. (2022). *Education in Sport and Physical Activity: Future Directions and Global Perspectives*. Routledge. USA: Routledge. [https://books.google.com/cu/books/about/Education\\_in\\_Sport\\_and\\_Physical\\_Activity.html?id=yVuazgEACAAJ&redir\\_esc=y](https://books.google.com/cu/books/about/Education_in_Sport_and_Physical_Activity.html?id=yVuazgEACAAJ&redir_esc=y)
- Pileta, I. R., Pérez, H. M., Téllez, I. F., Bombú, R. M., Cevallos, E. C., & Calle, W. T. (2019). Análisis integral de la motivación en boxeadores. *Revista Cubana de Investigaciones Biomédicas*, 38(2), 56-72. 30 de noviembre de 2021. [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S0864-03002019000200056](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-03002019000200056)



Rhodes, R. E., McEwan, D., & Rebar, A. L. (2019). Theories of physical activity behaviour change: A history and synthesis of approaches. *Psychology of Sport and Exercise*, 42, 100-109. <https://doi.org/10.1016/j.psychsport.2018.11.010>

Talavera Morales, Á. D., Sisa, O., Addonnis, E. R., Romero Frómeta, E., Peneida, C., & Barreto Andrade, J. A. (2018). Correlación entre tiempo libre y relaciones familiares. *Revista Cubana de Investigaciones Biomédicas*, 37(4), 1-15. 24 de noviembre de 2021. <http://www.revibiomedica.sld.cu/index.php/ibi/article/view/190>

Zanabria, L. (2020). La teoría de establecimiento de metas. Resultados empíricos acerca de la motivación. Munich: GRIN Verlag. [https://books.google.com.cu/books/about/La\\_teor%C3%ADa\\_de\\_establecimien\\_to\\_de\\_metas\\_R.html?id=GbrjDwAAQBAJ&redir\\_esc=y](https://books.google.com.cu/books/about/La_teor%C3%ADa_de_establecimien_to_de_metas_R.html?id=GbrjDwAAQBAJ&redir_esc=y)

**Conflicts of interest:**

The authors declare that there is no conflict of interest.

**Authors' contributions:**

**Verónica Janeth Vaca Catute:** Conception of the idea, literature search and review, instrument making, instrument application, compilation of information resulting from the instruments applied, statistic analysis, preparation of tables, graphs, and images, database preparation, general advice on the topic addressed, drafting of the original (first version), review and final version of the article, article correction, authorship coordinator, translation of terms or information obtained, review of the application of the applied bibliographic standard.

**Fernando Alfonso Cedeño Alejandro:** Conception of the idea, literature search and review, instrument making, instrument application, compilation of information resulting from the instruments applied, statistic analysis, preparation of tables, graphs, and images, database preparation, general advice on the topic addressed, drafting of the original (first version), review and final version of the article, article correction, authorship coordinator, translation of terms or information obtained, review of the application of the applied bibliographic standard.



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. Copyright (c) 2022 Verónica Janeth Vaca Catute, Fernando Alfonso Cedeño Alejandro.

