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ORIGINAL RESEARCH

Leisure Attitude, Self-Rated Health, and Psychological Well-Being in Older Adults: A Moderated Mediation Model

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Purpose: A positive leisure attitude among older adults may have a beneficial effect on psychological well-being, both directly and indirectly by fostering a more positive perception of one's health. This paper presents a correlational design that explores associations among leisure attitude, self-rated health, and psychological well-being, and analyzes the potential moderating role of gender in these relationships.

Patients and Methods: The sample was selected using simple random probability sampling (N= 409; 61.9% female; Mean age = 72.9; SD = 8.43¸ Range of age 53 to 93 years). Diverse sociodemographic information was collected, and leisure attitudes, self-perceived health, and psychological well-being (positive affect and emotional ties) were assessed.

Results: The results revealed a positive effect of leisure attitude on self-rated health and psychological well-being, with self-rated health fully mediating the association between the behavioral component of leisure attitude and psychological well-being. Furthermore, the moderating effect of gender on the relationship between self-rated health and psychological well-being was stronger among men.

Conclusion: Positive cognitive and emotional perceptions of leisure among older adults seem to benefit psychological well-being and improve self-rated health, thereby contributing to healthy ageing.

Keywords: ageing, older adults, gender, attitudes to leisure, psychological well-being, emotional ties

Introduction

As a result of increased life expectancy and lower birth rates, the number of Older Adult People (OAPs) in the world has risen significantly in recent years.[1] So much so, in fact, that by 2030, the number of people aged 60 years and over is expected to reach 1.4 billion (400 million more than in 2020), and by 2050, this figure is expected to rise to 2.1 billion.[2] These estimates about the elderly may vary depending on the age taken as a reference. Although 65 years of age has traditionally been considered the threshold for older age, some academic works include people over 50 in this group (e.g).[3,4] This type of categorization is consistent with initiatives such as SAGE,[5] promoted by the WHO, or COURAGE,[6] carried out by the EU. These projects are large-scale aging research; SAGE collects representative samples from China, Ghana, India, Mexico, Russian Federation and South Africa. COURAGE tries to replicate the work but at a European level.

Thanks to this type of work, it is possible to affirm that ageing is a natural, gradual, continuous process inherent to all human beings, although individual characteristics and the environment both play a key role in its evolution. In addition to the biological changes associated with the passage of time, many other changes occur also in the field of social relationships. It is

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therefore essential for OAPs to be able to maintain their functional capacities. In this framework, society should adopt a view of ageing that moves away from stereotypical representations of disease and the negative perceptions commonly associated with older people. In this regard, the WHO[7] understands active ageing as "the process of optimizing opportunities for health, participation and security in order to improve the quality of life of people as they age" (p. 5). It conceives healthy ageing as "the process of promoting and maintaining the functional capacity that enables well-being in old age" (p. 30). Promoting quality of life and maintaining functional capacity are therefore crucial elements in active and healthy ageing.[8]

Active ageing is a current paradigm that aims to foster an alternative approach to old age. According to this perspective, actions that promote people's autonomy, creativity, freedom and good ageing practices are of particular importance.[9] In this sense, active and healthy ageing is much more than the absence of disease since the focus is on maintaining functional capacities. Moreover, this understanding of the ageing process is based on three primary pillars: active participation, health, and safety.[10] Thus, the aim is for older people to be able to continue engaging in and experiencing the activities they value most, including leisure and free time activities.

Leisure and a Positive Leisure Attitude

OAPs' acceptance of ageing has changed in recent years. It is now generally accepted that individuals should deal with the process of growing older in a participatory and proactive way, avoiding disconnection or isolation from society. There are many ways in which OAPs can participate, although programs for the elderly tend to focus primarily on engagement in actions in which they play an active role. These activities include social participation (such as involvement in charitable associations or thematic interest groups), animal-assisted interventions, enrollment in friendship clubs, leisure activities and skills development, among others (see Gardiner et al).[11] In this sense, Ragheb and Beard[12] argue that attitude towards leisure activities may be one of the fundamental elements determining individuals' willingness to participate in such pursuits, with a positive leisure attitude reflecting OAPs' ability to maintain an active lifestyle.[13]

The role of leisure varies from person to person, depending on the beliefs and strategies associated with it. According to Iwasaki et al[14] these may include empowerment (leisure as a means of developing resources for coping with life's challenges), mood enhancement (increasing positive and decreasing negative affect) and palliative coping (a respite from stress which enables the individual to cope better with said stress). Regardless of its intended purpose, however, leisure appears to have potential effects on both short-term well-being (eg, stress reduction) and long-term health. Thus, leisure activities can help individuals strike a positive balance in different aspects of their lives.[15]

To achieve a good balance between different areas of life, attention must be paid to personal, interpersonal, and collective needs. The way in which OAPs experience and approach leisure will determine whether these needs are met.[16] For example, a lifestyle in which leisure time involves some kind of physical activity will help promote health and have a positive impact on quality of life.[17,18] Moreover, its consequences are particularly relevant among retired people, who have more leisure time available than other groups, such as working parents, for example.[16] However, the development of leisure attitude is influenced by both context and previous individual experience, through which people acquire affective feelings and beliefs associated with leisure.[19] It is not, therefore, a static attitude, but rather a dynamic one that may change over the years, in accordance with the individual's knowledge, health, thoughts and concept of life.[20,21]

Relationship Between Leisure, Health, and Gender

Previous research (e.g)[22] has shown that leisure may play a key role in improving long-term psychological well-being. In general, greater participation in leisure activities during old age is associated with better health status.[22–25] In this regard, a study with a large sample of older Chinese adults (N = 7689), Zhao et al[26] showed that older individuals who engage more frequently and in a greater number of leisure activities are more likely to experience successful aging. However, OAPs' health impairments may influence their leisure activity choices and attitudes toward leisure.[27] In addition to health impairment-related constraints, leisure opportunities may also be impacted by other variables, such as the environment in which the individual lives, particularly in the case of dependent people in rural areas.[28] Participation in leisure activities has been found to be effective in improving depressed mood and increasing psychological well-being,[16] and it has also been shown that general life satisfaction is related to life outlook and health status, which in turn determine participation in activities.[29]

However, the relationship between leisure and health may be even more complex since gender may act as a moderating factor between different health-related variables. For example, Gouveia et al[30] found that gender moderated the relationship between physical activity and health, with engagement in leisure-time physical activity being a good predictor of quality of life among men who enjoyed better health. Moreover, higher levels of health among men were found also when subjective measures were used. Indeed, among older age groups, being male has been related to higher levels of happiness,[31] life satisfaction,[32] and subjective health.[33] Moreover, this poorer perception of physical and psychological health among women does not seem to depend on any other relevant variables, such as the number of chronic pathologies or the number of prescription drugs taken.[34]

In addition to influencing aspects linked to OAPs' health, gender also seems to influence their participation in leisure activities. Paillard-Borg et al[35] identified a series of factors associated with lower involvement, which included having a mental disorder, having some kind of physical limitation, being a woman or having a restricted social network. In this sense, differences have been observed between men and women in terms of the type and form of their involvement in leisure activities.[36,37] Numerous studies have reported that women spend less time on leisure and only spend more time than men on activities related to caregiving and unpaid work in the home.[38–41] These gender differences become more apparent as age increases in cultural conditions in which the gender gap is more evident, such as in southern European countries (see,[42,43] for example). The greater responsibilities socially assigned to women in these countries result in a lack of time for personal care and a greater risk of loneliness, which can lead to social exclusion. According to data from the Organization for Economic Cooperation and Development,[44] Portugal is one of the countries with the largest gender gaps in terms of leisure time (289 hours enjoyed per year by men, compared to 200 hours for women) and unpaid work (96 hours spent on these tasks by men, compared to 328 hours by women), which includes caregiving.

Psychological Well-Being

Traditionally, psychology has viewed mental health from the perspective of the biomedical model, focusing on pathology and impairment levels as fundamental elements in OAPs.[45,46] This has resulted in the positive aspects of mental health, such as satisfaction, joy, happiness, pleasure in living, optimism, and psychological well-being, being neglected. However, psychological well-being is a key aspect in OAPs' personal development.[47] It can contribute greatly to the accuracy of mental health measures, beyond symptoms of psychological distress.[48] It is widely accepted that mental health in OAPs seems to pivot on two principal dimensions: psychological distress and psychological well-being.[45,48] The positive dimension of mental health, ie, psychological well-being, has been conceptualized in different ways. According to Ryff,[49,50] it is a multidimensional construct associated with self-acceptance and autonomy, positive relationships with others, mastery of the environment, personal growth and having a purpose in life. For their part, Veit and Ware[48] conceive psychological well-being in terms of two dimensions: positive affect and emotional ties. Positive affect comprises positive emotions and moods, such as feeling happy, satisfied, relaxed, in a good mood, cheerful, optimistic, at peace or hopeful about the future. The emotional ties dimension refers to emotional bonding with other people, or in other words, feeling loved and wanted, having good affective relationships, and not feeling lonely or isolated.

The relationship between psychological well-being and various psychosocial variables in the ageing process has been a key issue in the scientific literature in recent years. Psychological well-being has been associated with intrapersonal variables (eg, self-esteem, self-efficacy, autonomy, self-rated health, attachment style, life satisfaction, etc.), situational variables (eg, perceived social or family support, participation in social activities, attitudes, etc.), and sociodemographic factors such as age, gender, marital status, education level, place of origin, and place of residence, among others.[22,46,47,50–55]

Justification, Hypotheses, and Objectives

As we have seen, the extant scientific literature has demonstrated the relationship that exists between OAPs' participation in leisure activities and better health. However, research in this field is much more limited when we talk about the relationship between attitudes towards leisure in the elderly in their cognitive and affective dimensions and better health and well-being, as studies have typically focused more on participation in leisure activities (ie, the behavioral dimension of attitude). Moreover, a positive leisure attitude does not always translate into associated behaviors (ie, participation in leisure activities). For example, institutionalized individuals may have a positive attitude towards this type of activity, but

if they are constrained by some kind of physical limitation, they will not be able to benefit from its effects. Furthermore, previous studies have shown that gender is a factor that should be taken into consideration when analyzing participation in leisure activities and the perception of subjective health, life satisfaction and psychological well-being. Likewise, the potential moderating effect of gender on the relationships between all these variables, and particularly between participation and involvement in leisure activities and psychological well-being, should not be overlooked. Moreover, this gender effect may be linked to or influenced by other sociocultural factors, such as the distribution of responsibilities in the care of family members and other issues related to the performance of roles. Considering the above, the present study has two main aims: (a) to analyze the relationships between Leisure Attitude, Gender, subjective perception of general health status (Self-rated Health) and Psychological Well-being; and (b) to explore whether Self-rated Health mediates between Leisure Attitude and Psychological Well-being. Based on these two aims, the following hypotheses are proposed:

H1: Leisure Attitude will have a positive effect on Psychological Well-being.

H2: The relationship between Leisure Attitude and Psychological Well-being will be mediated by Self-rated Health.

Specifically, we expect to find positive associations between these variables; in other words, we expect a more positive Leisure Attitude to be linked to better Self-rated Health, which in turn will be associated with higher levels of Psychological Well-being.

H3: Gender will moderate these relationships; specifically:

H3A: Gender will moderate the effect of Leisure Attitude on Psychological Well-being.

H3B: Gender will moderate the effect of Self-rated Health on Psychological Well-being.

Moreover, we expect the magnitude of the associations hypothesized in H1 and H2 to differ in accordance with gender, being greater among men than among women.

Material and Methods

Participants

The sample comprised 409 Portuguese adults, 253 women (61.9%) and 156 men (38.1%), aged between 53 and 93 years, with a mean age of 72.9 years (SD = 8.43). In terms of marital status, most were married (n = 191; 46.7%) or widowed (n = 144; 35.2%), and in relation to place of origin, 52.6% lived in rural areas and the remaining 47.4% lived in urban areas. Most lived in their own homes (88.6%), and only 11.4% lived in institutionalized facilities. Concerning education level, 164 (40.1%) participants had primary school qualifications, 66 (16.1%) had not completed any educational level, and 70 (17.1%) had higher-level qualifications.

Instruments

Sociodemographic Questionnaire

An ad hoc questionnaire was constructed to collect sociodemographic information about age, gender, education level, marital status, area of residence (urban/rural) and whether participants were in a situation of dependency (yes/no).

Leisure Attitude

Leisure attitude was assessed using the Portuguese adaptation[56] of the Leisure Attitude Scale (LAS).[12] This instrument is a self-report scale comprising 36 items divided into three 12-item subscales, which evaluate attitude in accordance with three dimensions: cognitive, affective, and behavioral. The cognitive component assesses general knowledge about leisure and beliefs about the relationship between leisure and health, happiness, and the personal benefits of engaging in leisure activities (eg, "Engaging in leisure activities is a wise use of time"). The affective component assesses

respondents' experiences, feelings, and pleasure with respect to leisure (eg, "My leisure activities give me pleasure"). Finally, the behavioral component assesses intention to participate in leisure activities, ie, planning and actions, and past, present, and future experiences with leisure (eg, "I do leisure activities frequently").

In the present study, the overall reliability of the scale ($\alpha = 0.98$) and the individual values obtained for the cognitive ($\alpha = 0.97$), affective ($\alpha = 0.98$) and behavioral ($\alpha = 0.94$) subscales exceeded both the overall internal consistency values obtained for the Portuguese adaptation of the instrument ($\alpha = 0.91$), and the individual values obtained for each of its subscales: cognitive ($\alpha = 0.86$), affective ($\alpha = 0.86$) and behavioral ($\alpha = 0.79$).

Self-Rated Health

Self-rated health was assessed using the Self-rated Health Scale[57] a simple measure of General Health in older adults. Maddox found 65% congruence between instrument scores and medical health assessments. The instrument assesses respondents' subjective perception of their general health status through a single question. A subsequent adaptation was carried out by the WHO[58] to homogenize data collection and health objectives across Europe. The new version accepts five response options: 1: "excellent", 2: "good", 3: "neither good nor bad", 4: "bad", and 5: "very bad". In the present study, the measures were inverted to facilitate interpretation, with a score of 1 indicating "very bad" and a score of 5 indicating "excellent". The instrument has been shown to be a sensitive predictor of mortality, with those reporting "bad" or 'very bad' health being twice as likely to die (from any cause) than those reporting "excellent" health.[59]

Psychological Well-Being

Psychological Well-being was assessed using the Mental Health Inventory (MHI-38),[48] an instrument that evaluates Mental Health, of which there is a Portuguese adaptation validated by Ribeiro.[45] The inventory comprises 38 items rated on a 5- or 6-point Likert-type scale and assesses Psychological Distress and Psychological Well-being. In the present study, only the two subscales that evaluate participants' Psychological Well-being were considered: Positive Affect (11 items, eg, "future hopeful") and Emotional Ties (3 items, eg, "felt loved and wanted"). The overall Psychological Well-being score is calculated by summing the raw values of each subscale (after converting the scores corresponding to the reverse-scored items), with higher values indicating greater psychological well-being. The Portuguese adaptation of the instrument was found to have good reliability values: overall inventory $\alpha = 0.96$; Psychological Well-being $\alpha = 0.91$ [Positive Affect $\alpha = 0.91$; Emotional Ties $\alpha = 0.72$].[45] Similar reliability values were obtained in the present study (Psychological Well-being $\alpha = 0.92$; [Positive Affect $\alpha = 0.92$; Emotional Ties $\alpha = 0.69$]).

Procedure

After approval of the research proposal by the Bioethics Committee of the National University of Distance Education, several institutions in the Northern and Central Regions of Portugal were contacted by the research team to evaluate their interest in the present study. Their pertinent boards analyzed the ethical implications of the study and the possibility of participating in it. In this sense, directors of the institutions granted permission for data collection, however, they refused to allow their names to be published in the manuscript, citing confidentiality and anonymity concerns. In any case, those who approved their collaboration compromised to administer the questionnaire to their volunteer users and help with the data collection process. Those willing to participate signed a consent form. All participants were informed of the research aims before answering the questionnaire, and all were reminded that they could withdraw from the study at any time. The data were processed anonymously and were kept strictly confidential. The study complied with the ethical principles governing research involving humans, as enshrined in the Declaration of Helsinki (2013), regarding informed consent, confidentiality, and procedures.

The data were collected by two members of the research group, trained on psychological assessment in elderly to generate an adequate relationship of trust that would favor communication and create the initial rapport. In addition, a briefing was agreed with the rules about the questions and how to fill in the questionnaires according to the participants' answers.

Questionnaires were administered in 25-minute face-to-face interviews. Members of the research team gave participants the instructions required to answer the questions and were available during interviews to resolve any doubts.

Participants were told that there were no right or wrong answers and that we simply wanted to understand how they perceived things. As such, they were instructed to choose the most suitable response option for each item.

Design

The study followed an ex post facto prospective correlational design. The sample was selected using simple random probability sampling, with everyone having the same probability of being chosen.[60]

Data Analysis

Data were processed using the Statistical Package for Social Sciences software (IBM Corp., 2016), version 24. Statistical models were formulated using the PROCESS 4.2 macro, a computational tool developed by Hayes[61] for analyzing mediation and moderation processes. This tool overcomes the limitations of the stepwise model developed by Baron and Kenny.[62] A Bootstrap procedure (PROCESS assumes 5000 "resamples") with a confidence level of 0.05 was used to assess unconditional indirect effects.[61,63,64] In estimating the models, the variables used in the plot were mean centered to enable the regression coefficients to be easily perceived. First, the direction and magnitude of the relationships between the different variables were examined using Pearson's R statistic. Second, a moderated mediation model was tested. Self-rated Health was considered the mediating variable in the relationship between Leisure Attitude (independent variable) and Psychological Well-being (dependent variable), with Gender as the moderating variable (see Figure 1). Finally, the same model was broken down into the different components of Leisure Attitudes and Psychological Well-being.

Results

The correlation analyses revealed positive and significant correlations between all the study variables. As shown in Table 1, the strongest correlations were observed between the internal scales of the different instruments; in other words, between the two subscales (Positive Affect and Emotional Ties) of the Psychological Well-being questionnaire and between the three components of the Leisure Attitudes Scale.

Table 2 presents the descriptive statistics for the independent (Leisure Attitude) and dependent (Psychological Well-being) variables included in the moderated mediation model. Regarding the mediating variable (Self-rated Health), when participants were asked how they would rate their health status, 43.8% (n = 179) answered "neither good nor bad", and 40.3% (n = 165) answered "good".

As shown in Table 2, the mean scores for the Leisure Attitude and Psychological Well-being variables were higher than the neutral points of the corresponding scales and subscales. The results obtained for Leisure Attitude were particularly noteworthy, since the maximum score was the most frequent response in all subscales. This finding suggests

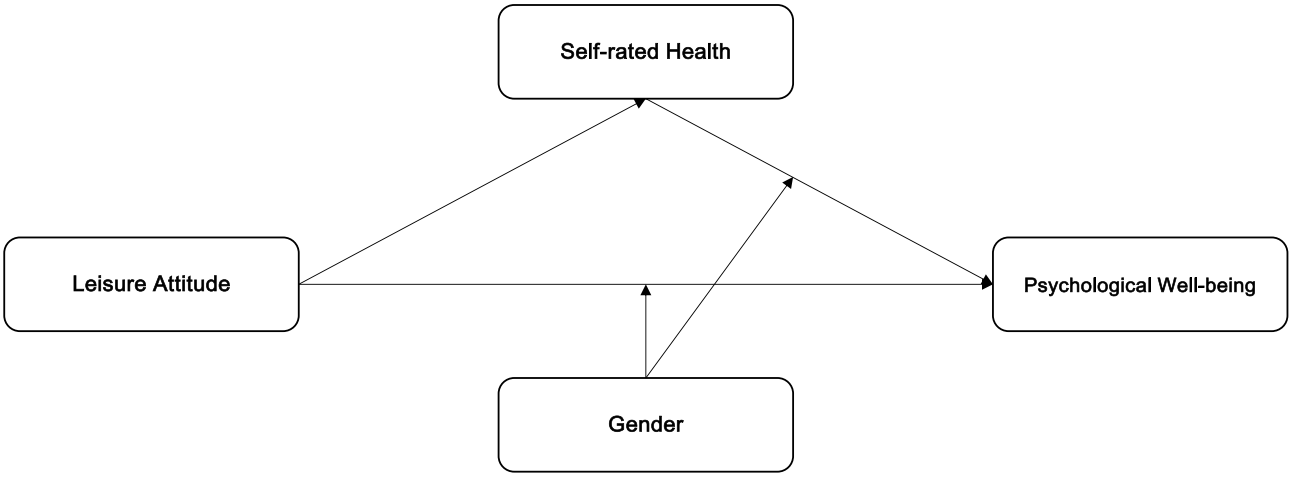

Figure 1 Conceptual diagram of the moderated mediation model under study.

Table 1 Pearson's Correlation Coefficients Between the Variables Under Study

Variable	1.	2.	3.	4.	5.	6.
1. S-RH	1					
2. MHI-GPA	0.408*	1				
3. MHI-ET	0.325*	0.671*	1			
4. LAS-C	0.196*	0.347*	0.292*	1		
5. LAS-A	0.221*	0.385*	0.328*	0.881*	1	
6. LAS-B	0.249*	0.361*	0.218*	0.677*	0.779*	1

Notes: *Statistically significant; 1: S-RH, Self-Rated Health; 2: MHI-GPA, MHI General Positive Affect; 3. MHI-ET, MHI Emotional Ties; 4. LAS-C, Leisure Attitudes Scale Cognitive; 5. LAS-A, Leisure Attitudes Scale Affective; 6. LAS-B, Leisure Attitudes Scale Behavioral.

Table 2 Descriptive Statistics for Self-Rated Health, Psychological Well-Being, and Leisure Attitudes

Measure	Min.* (Freq.)	Max.* (Freq.)	Mode	Median	Mean (SD)
Self-rated Health	**1 (8)**	**5 (11)**	**3**	**3**	**3.31 (0.78)**
MHI (BP)	**14 (1)**	**84 (1)**	**59**	**54**	**53.84 (13.68)**
General Positive Affect	*11 (2)*	*66 (1)*	*48*	*42*	41.72 *(10.94)*
Emotional Ties	*3 (4)*	*18 (34)*	*10*	*12*	12.12 *(3.68)*
LAS	**36 (1)**	**180 (33)**	**180**	**156**	**146.06 (31.16)**
Cognitive	*12 (2)*	*60 (134)*	*60*	*56*	*52.00 (9.95)*
Affective	*12 (7)*	*60 (116)*	*60*	*55*	*50.57 (11.48)*
Behavioral	*12 (5)*	*60 (40)*	*60*	*45*	*43.49 (12.34)*

Notes: In the table, scales are shown in bold while subscales are shown in italics; *The minimum and maximum values coincide with the scales' minimum and maximum possible limits.
Abbreviations: MHI, Mental Health Inventory; LAS, Leisure Attitude Scale; FREQ, frequency.

that, even though some of the older adults chose the lowest-scoring responses, most reported a positive Leisure Attitude and claimed to feel psychologically well.

Moderated Mediation Models

To analyze whether Self-rated Health explained the association between Leisure Attitude and Psychological Well-being, a moderated mediation model was tested using the PROCESS macro for SPSS,[65] specifically model 15. This is a mediation model in which one variable moderates the relationship between the independent and dependent variables, as well as between the dependent and mediating variables. Leisure Attitude was found to explain 6% of the variance observed in Self-rated Health [F (1401) = 24.919, $p < 0.001$]. The global model with all variables explained 27.23% of the variance observed in Psychological Well-being [F (5397) = 29.708, $p < 0.001$].

The results of the model analyzed confirmed our second hypothesis (regarding mediation), revealing significant indirect effects in the case of both men = 0.0436, [0.022; 0.069] and women = 0.032, [0.015; 0.053]. However, they do not allow us to accept the third hypothesis regarding moderated mediation, in which gender was expected to play a moderating role (Moderated Mediation Index = −0.0121, [−0.034; 0.008]). The direct relationship observed between

Leisure Attitudes and Psychological Well-being (0.144, [0.105; 0.183]) enables us to affirm that Self-rated Health only partially mediates this relationship (see Figure 2).

Since the moderated mediation model analyzed failed to reveal any moderating effect of gender, we decided to explore other possible models, considering the potential interactions between gender and other variables. We therefore contemplated the three components of the Leisure Attitude Scale (cognitive, affective, and behavioral) and the Positive Affect and Emotional Ties subscales of Psychological Well-being separately; in total, six additional models were tested.

As shown in the Figure 3, not all the associations were significant, and differences were found in relation to the initial model. Two results were of relevance: (a) the lack of any direct relationship between the behavioral component of

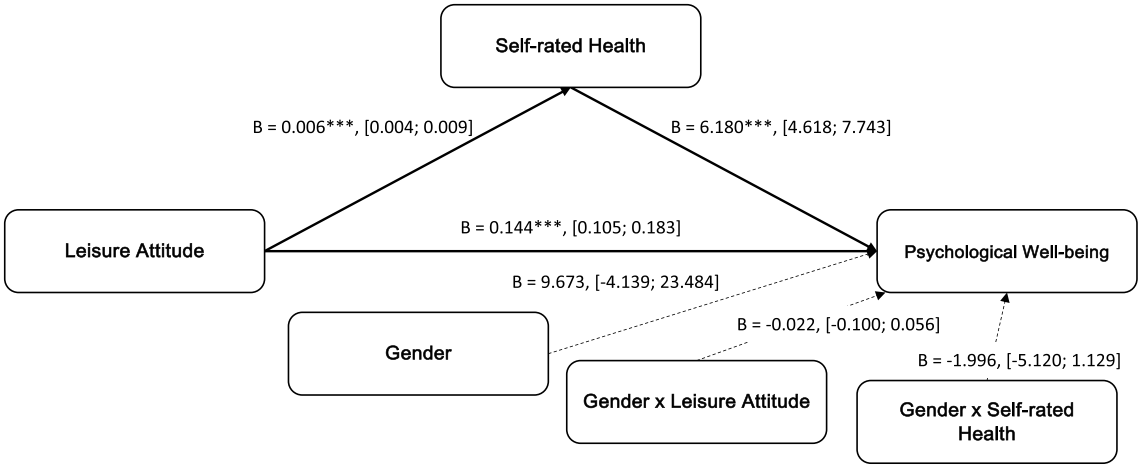

Figure 2 Moderated mediation analysis model: leisure attitude (independent variable), self-rated health (mediating variable), gender (moderating variable) and psychological well-being (dependent variable).
Note: Statistically significant relationships are indicated with thicker lines. Significance levels: ***$p < 0.001$.

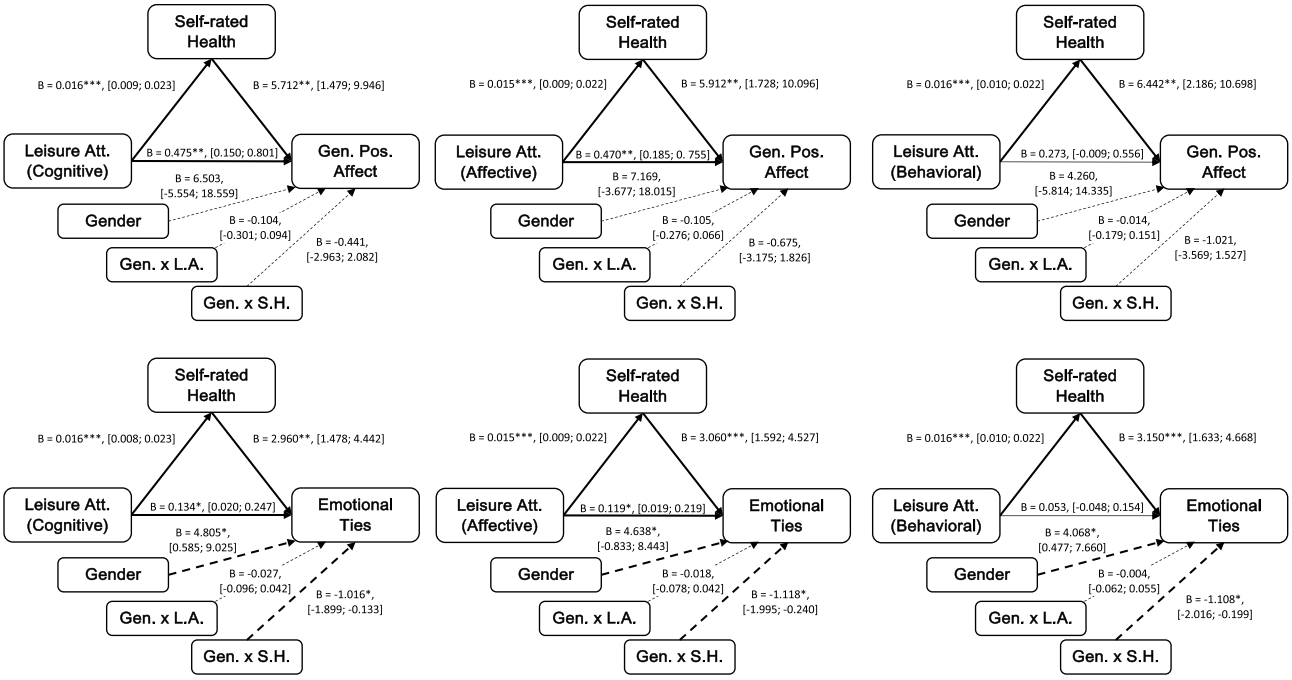

Figure 3 Moderated mediation analysis models with the different components of Leisure Attitude and the two Psychological Well-being subscales.
Note: Statistically significant relationships are indicated with thicker lines. Significance levels: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 3 Variation Explained by the Mediation and Moderated Mediation Effects in Each Model, and Support for Hypotheses

Model	Direct Effect [CI 95%]	Indirect Effect [CI 95%] Males	Indirect Effect [CI 95%] Females	Moderated Mediation Index [CI 95%]	R^2	Hypothesis Support			
						H_1	H_2	H_{3A}	H_{3B}
General	0.144*, [0.105;0.1833]	0.044*, [0.023;0.015]	0.032*, [0.015;0.052]	−0.012, [−0.034;0.007]	0.272	✓	✓	–	–
Cog. – GPA	0.475*, [0.150; 0.801]	0.082*, [0.035;0.140]	0.075*, [0.032;0.126]	−0.007, [−0.054;0.036]	0.246	✓	✓	–	–
Aff. – GPA	0.470*, [0.185;0.755]	0.079*, [0.036;0.131]	0.068*, [0.033;0.114]	−0.010, [−0.052;0.029]	0.265	✓	✓	–	–
Beh. – GPA	0.273, [−0.009;0.556]	0.085*, [0.042;0.136]	0.069*, [0.034;0.114]	−0.016, [−0.059;0.028]	0.243	–	✓	–	–
Cog. – ET	0.134*, [0.020;0.247]	0.030*, [0.013;0.052]	0.014*, [0.004;0.028]	−0.016*, [−0.035;-0.001]	0.177	✓	✓	–	✓
Aff. – ET	0.119*, [0.019;0.219]	0.029*, [0.014;0.048]	0.012*, [0.003;0.024]	−0.017*, [−0.035;-0.002]	0.194	✓	✓	–	✓
Beh. – ET	0.053, [−0.048;0.154]	0.032*, [0.016;0.051]	0.015*, [0.005;0.028]	−0.017*, [−0.036;-0.002]	0.142	–	✓	–	✓

Notes: *Statistically significant.
Abbreviations: COG, Cognitive Scale from LAS; AFF, affective scale from LAS; BEH, Behavioral Scale from LAS; GPA, General Positive Affect; ET, Emotional Ties.

Leisure Attitude (ie, intention to engage in leisure activities) and Psychological Well-being measures; and (b) the moderating influence of Gender on elements linked to the Emotional Ties subscale.

In relation to the first of these two findings, and as shown in Table 3, the behavioral component of Leisure Attitude was found to affect Psychological Well-being through Self-rated Health. It is important to note that the mediation in this case was full, whereas in the case of the other two components (cognitive and affective), the mediation was partial, since they were both found to have a direct effect also on the Psychological Well-being of older adults.

Regarding the second differential aspect of these models, Gender was found to influence Psychological Well-being on a more social level. This enables us to accept the hypothesis of moderated mediation in those models in which Emotional Ties was taken as the dependent variable. Moreover, when the Positive Affect subscale was taken as the dependent variable, the relationship between the independent and mediating variables was stronger than in the case of the Emotional Ties subscale. These higher scores are reflected in the fact that, as shown in Table 3, the percentage of variance explained was greater in both the general model, which took Psychological Well-being as the dependent variable, and those that took Positive Affect as the dependent variable.

Considering the negative nature of the moderated mediation indices and the Gender values reported, we can affirm that the positive relationship between Self-rated Health and the Emotional Ties dimension of Psychological Well-being was stronger in the case of men.

By way of example, Figure 4 shows the influence of Gender on the values of the independent variable and the mediator in the model that took the cognitive component of Leisure Attitude as the dependent variable.

As shown in Figure 4, women had higher baseline scores than men in the socio-affective dimension of Psychological Well-being. However, the magnitude of the mediating effect of Self-rated Health was lower.

Discussion

The present study aimed to explore the relationship between older adults' attitude to leisure and their psychological well-being. To this end, we conceived leisure attitude as a three-dimensional structure (cognitive, affective, and behavioral), analyzing all three components in a differentiated manner.

Concerning the first hypothesis, the results confirm a positive relationship between leisure attitude and psychological well-being in OAPs. This is consistent with that reported extensively in the literature, within the framework of social psychology, and highlights the key role played by attitudes in many aspects of life. Specifically, the role of attitudes has been explored in terms of beliefs and opinions (cognitive component) and feelings of liking or disliking (affective component) towards the attitudinal object (e.g).[66,67] However, the relationship between the behavioral component of attitude and the attitudinal object (in this case leisure) is not always significant. For example, in study with 80-year-old nursing home residents, the authors found a positive leisure attitude, except for the behavioral subscale measure.[68] These

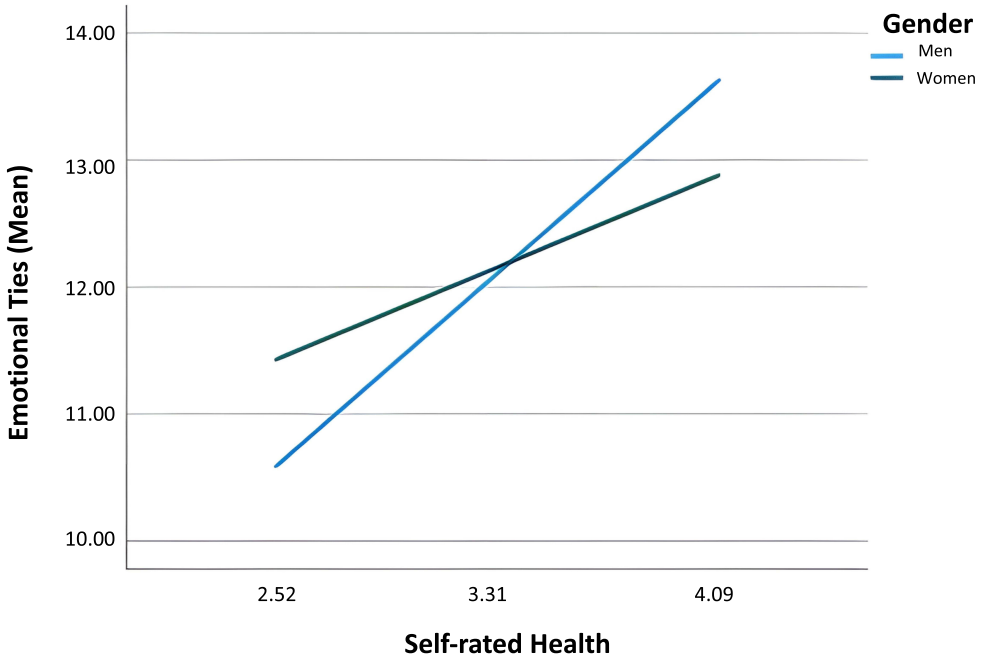

Figure 4 Moderating effect of gender on the relationship between Emotional Ties and Self-rated Health.

same authors reported that, despite having a positive attitude to leisure, older people do not always engage in leisure activities because their physical limitations make it more difficult for them to acquire new routines. However, cognitive, and emotional perceptions seem to be of vital importance in OAPs' leisure attitude. Indeed, remaining mentally active may be enough to ensure greater psychological well-being. However, although this interpretation would explain the relationship observed between the cognitive and emotional components of leisure attitude and psychological well-being, it does not explain the lack of a direct relationship between the behavioral component and this same outcome variable. It is therefore possible that other factors not contemplated in our study, such as physical or psychosocial limitations, may have influenced participants' intention to engage in leisure activities. In sum, it seems likely that although many older adults have positive beliefs, opinions and thoughts regarding leisure, and leisure activities arouse feelings of pleasure and enjoyment, self-perceptions of functional and even financial limitations may diminish their tendency or intention to engage in these activities. It is also possible that other intrapersonal variables, such as self-efficacy expectations or personal beliefs in one's abilities and skills,[69,70] play an important role in leisure activities. In this regard, self-efficacy expectations are essential to the positive dimension of life and personal development.[71] Indeed, self-efficacy to perform social activities has been found to have an impact on OAPs' quality of life, with older adults who are more confident in their own abilities reporting a higher quality of life than those who manifest lower self-efficacy.[72] Moreover, self-efficacy and other variables, such as self-esteem, for example, seem to function as promoters of physical, psychological, and social well-being in OAPs. Consequently, psychological well-being, rather than being associated with age, is more closely related to one's perception of one's health and autonomy, the practice of physical-sporting activities, self-esteem, and self-efficacy for ageing.[47]

Our second hypothesis, which concerns the mediating role of self-rated health in the relationship between leisure attitude and psychological well-being, was confirmed in all the models analyzed. This mediating role of health is not a novel result in the literature. The importance of self-rated health can be observed mainly in models that consider the behavioral component of leisure attitude, in which this variable fully mediates the relationship between attitude and psychological well-being.[73,74] People's subjective evaluation of their health status is a factor to which great importance has been attached in relation to well-being,[75–78] with an older person's self-assessment of their health being considered an important predictor of survival (e.g).[79–81] Moreover, self-rated health constitutes one of the recommended health indicators for health monitoring.[82] In this sense, Falk et al[83] highlight the importance of using self-rated health as

a simple measure to identify vulnerable populations worldwide, since the self-perception of poor health also increases the risk of suffering from mental illness.

Several studies (e.g)[84–86] have shown that participation in leisure and free time activities contributes to a positive self-assessment of health. Older people who engage in leisure activities (eg, cultural, recreational, personal growth, physical exercise, etc.) perceive a better quality of life and greater mental well-being, thereby compensating for some of the physical and social deficits associated with their age.[87,88]

Third, we set out to analyze the potential moderating role of gender in the associations between leisure attitude, self-rated health, and psychological well-being. Our results reveal that, although gender does not seem to influence the relationship between leisure attitude and psychological well-being, it does moderate the relationship between self-rated health and this second variable. Specifically, the moderating effect was observed when the socio-affective dimension of psychological well-being (ie, emotional ties) was taken as the dependent variable; or in other words, when the outcome measured was whether the individual felt loved, was in a fulfilling romantic relationship or did not feel lonely. Our findings indicated that women had higher baseline scores on the emotional ties subscale than men. This may seem inconsistent with that reported by other studies, which have found that men generally have better levels of psychological well-being than women (e.g).[89,90] However, our data do not actually contradict this idea, since men were observed to have higher levels of well-being, but only when they perceived themselves as healthy. In this sense, it is possible that men who report a better state of health feel more loved or express fewer feelings of loneliness than women, for whom "feeling loved" (or being emotionally attached to other people) is independent of their perceived state of health. The fact that men feel loved when their perception of health is high may to some extent be explained by traditional gender stereotypes and roles related to personal worth. Consequently, it is possible that men who perceive themselves as strong and healthy feel more loved and fear loneliness less. In contrast, when their health is compromised, men may undervalue themselves, no longer feel loved by their partner or close associates, and express greater emotional loneliness, which in turn generates psychological distress. In other words, men may experience increased feelings of vulnerability and hypervigilance in the face of environmental threats and eventually enter a loop in which their physiological functioning is also altered, and their risk of morbidity and mortality increases.[52] Furthermore, these differences between men and women may also depend on other variables not contemplated in this study, such as emotional intelligence, in which construct much of the extant literature reports significantly higher scores among women.[91] The higher scores obtained by women in terms of managing and understanding emotions[92] may enable them to carry out a more realistic assessment of the emotional ties that bind them to their significant others. As a result, women may be better able to separate feelings of being supported and loved (ie, psychological well-being) from their subjective perception of health (ie, self-rated health). In contrast, men may have greater difficulty differentiating between the two: "if I feel well, I feel that everything else is going well; if I feel bad, everything around me seems to be in a bad situation as well".

The main limitation of the present study is linked to its design since it uses a correlational research methodology. Another important limitation derives from the limitations inherent to self-report measures in data collection. Future research would therefore do well to consider the importance of collecting data through in-depth interviews, since this would serve to strengthen the validity of the models proposed.

The literature provides us with a heterogeneous set of interrelated factors between attitudes towards leisure, self-rated health, and psychological well-being in OAPs. Future studies should therefore consider more complex models including personal variables and (eg, quality of life, autonomy, self-esteem, and self-efficacy), sociodemographic factors (eg, gender, education level, marital status, and support networks), which help to better understand the complex interrelationships that exist between all these elements. Moreover, we consider attachment style to be an underexplored aspect that should be taken into account in research on health, emotion regulation, and psychological well-being of OAPs. In this regard, previous studies have reported an association between insecure attachment, health problems and emotional distress. In contrast, secure attachment seems to be one of the most characteristic elements of well-being, so much so, that it can be considered an essential resource for resilience and social adjustment in old age.[53]

Conclusion

This study allows us to draw some conclusions. First, positive beliefs and opinions and feelings of pleasure towards leisure are related to greater psychological well-being in older people, furthermore, the importance of the mediating role

of self-perceived health in this relationship is confirmed. Second, it is important to take how traditional gender roles can affect older people´s attitudes to leisure, so failing to take into account their personal needs and desires can contribute to perpetuating these gender roles. Third, the loss of social networks and loneliness, especially in the case of institutionalized individuals, are elements that can be very relevant in the attitudes towards leisure in OAPs. Finally, OAPs are agents in their own ageing; therefore, all programs and interventions should strive to provide them with training and to take advantage of the leadership that already exists in this population.[93]

Disclosure

The authors declare no conflicts of interest in this work.

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