

Article

Exploring the Instrumental and Emotional Supports for Sustainability and Social Participation

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Abstract: The prevalence of instrumental and emotional support received was investigated, and several psychosocial characteristics were studied in a Spanish population of all ages (10–85 years) and different social groups, by using an 88-item online questionnaire, with a total of 2013 respondents. Participants reported on the instrumental and emotional supports they receive, and on a set of psychosocial variables (emotion management, motivation, self-efficacy, social and communication skills, and social support), as well as their sociodemographic data; all of which were considered as contributions to a sustainable world. Instrumental and emotional supports for sustainability were significantly less prevalent among older participants, men, people with low educational levels, low autonomy levels, retired individuals, and those with a low-income level. Older and female participants were able to manage their own and other peoples' emotions significantly more frequently. Participant motivation was less prevalent among the participants with low autonomy levels and low-income levels. Younger participants with low autonomy levels were significantly less able to perform activities related to their self-efficacy. Extreme age groups, those with higher educational levels, singles, and those living alone, reported feeling lonely more often. These results help identify sociocultural characteristics of adults with low social participation, which is critical for developing useful strategies to promote community engagement and related benefits for older adults.

Keywords: support; emotions; self-efficacy; social interactions



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1. Introduction

The number of older adults has increased substantially worldwide in recent decades. Currently, adults over the age of 65 make up 8.5% of the world's population, and this number is expected to double. By 2050, older adults will represent 16.7% of the total population, which will increase the population of older adults in the world to 1.6 billion [1]. Specifically, Spain has one of the highest life expectancies, with a median age of 83, and if the trend continues, it is expected to reach 85.8 years in 2040 [2]. This increase in life expectancy, combined with the increasing social isolation of older adults [3], is leading developed countries to promote social ties and interpersonal relationships to achieve active aging; what this concept entails, including the promotion of well-being, quality of life, and active participation in society of people over 65, is essential for sustainability [4]. Highlighting the particular importance of engaging older adults in leisure activities promotes interpersonal relationships in this sense. Collaborative learning and the will to create a society for all people challenge us as never before; hence, these are educational and social commitments for all [5].

One way to build interpersonal relationships is to develop more social capital for sustainability in local communities. Social capital is defined as social networks that share norms, values and understandings, facilitating cooperation within or between a group or different population groups [6]. Several studies have shown that social capital has a positive impact on a variety of health outcomes, which include mortality, hospitalizations, self-reported health status, and depression [7–9].

Research in the field of interpersonal interactions has shown that age-related perceptions and stereotypes influence social participation among different population groups, which could reflect that perceptions of aging are determined by social factors [10]. Social participation can be defined as social initiatives in which people take a conscious part in a space, positioning themselves and joining other groups to face problems and manage requirements that allow us to respond to their needs or demands.

One source of social patterns that could promote a more negative perception of age is the age segregation of society, which leads to limited interactions between different generations [11]. Spatial and cultural segregation of people based on age results in restricted contacts between older and younger people, possibly increasing negative stereotypes and discrimination towards older people [12]. Loss of social roles in older people can reinforce these social processes [13]. As people age, the most important social roles in professional and family life are abandoned or become less mandatory. Losing these roles can lead to a loss of power, respect, and the social rewards they bring, leading to a worse perception of the aging process. Precisely, the social role of older people is the transmission of experience and being in charge of keeping the family together, offering advice and emotional support, taking care of the younger generations, and even helping financially.

Several studies [14–17] detail the activities most practiced for sustainability among older and young adults: talking, playing games, telling stories, watching TV, going for a walk together, or accompanying the children to school. It is also described that the least shared activities are reading, listening to music, and going on excursions and trips to the beach or the countryside.

The motivations for these shared activities may be based on the psychological, social, educational and cultural benefits perceived by both generations [14–19], related to psychological and social health, fostering personal relationships and ties based on enjoyment and voluntary basis; and the cultural and educational field, fostering co-learning and transmission of historical knowledge, traditions, culture and values [20–24].

In psychology and gerontology, the effect of leisure activity types on health and well-being has been studied, with emphasis on hobbies, informal social activities, and exercise [25–28]. Likewise, the frequency of social support, especially from family and friends [27], barriers [29] or health status [30] have been studied as variables associated with perceptions of the benefits of leisure among older adults. Other studies analyze the role of age, gender, education, marital status, and income level as factors that promote or inhibit participation, enjoyment, and perception of benefits through leisure in later life [25,26,31–33]. Gender is one of the factors that best distinguish leisure behavior among older people [25,34,35]. Gender differences can be observed both in the time spent participating in leisure activities, and in the type of activity selected. Mainly, women tend to choose activities where the main activity is social interaction, while men prefer solitary activities, such as gardening, sport and hobby activities [25,36].

Considering recent studies on the use of virtual tools [37] and the performance of intergenerational face-to-face activities [38], this study was carried out to try to learn more about how this affects this set of psychological patterns.

Instrumental support for sustainability is professional type support, related to personal care in the areas of health, nutrition, mobility, housekeeping, paperwork and/or administrative processes, etc. Emotional support for sustainability is more related to issues such as company and family ties. It is expressed in terms of affection, trust, listening, empathy, the physical transmission of affection, companionship, feelings of complicity, concern for their personal and/or family life, etc.

There is still insufficient evidence on the social aspects of age-related perceptions and stereotypes, and it is not entirely clear if the social experiences and social participation of different age and social groups influence their beliefs about aging. Therefore, the aim of this study was to investigate the prevalence of instrumental and emotional supports received, and to study several psychosocial characteristics, such as emotion management, motivation, self-efficacy, social and communication skills, and social support in a Spanish

population of all ages and from different social groups. All of them construct key aspects to guarantee a more sustainable and fairer world, for people of different generations.

2. Materials and Methods

2.1. Sample

The subjects in this study were people of any age and from various social groups who completed an internet questionnaire while living in Spain. The survey was completed by 2013 people (1405 women and 608 men), and the results were incorporated in the final study. The contact for participating was made through the formal sending of the request for the distribution of the survey among inter-university programs, associations, organizations, institutions and individuals throughout Spain. The participants were people without a diagnosis of cognitive problems. In the case of minors, parental authorization was requested for their participation in the study.

2.2. Instrument

This study used the previously validated Acción Conjunta Intergeneracional (ACIG) instrument [39]. It consists of an online questionnaire that, through 6 scales and 14 sub-scales, analyzes the information provided by people of all ages in relation to the instrumental and emotional supports they receive, and a set of psychosocial variables (emotion management, motivations, self-efficacy, social and communication skills, and social support). Sociodemographic data of participants (age, gender, place of origin, marital status, educational level, autonomy level, living arrangements, employment situation, and income level) were also collected by the questionnaire. Responses were recategorized when required for the statistical analysis.

2.3. Procedure

In October 2017, participants were contacted via the professional survey website Survey Monkey (Spain) and were asked to complete an online questionnaire. The questionnaire should take no more than 25–30 min to complete. Data were extracted in Excel format and appropriately coded for statistical analysis, according to the participants' answers, when the questionnaires were completed.

2.4. Data and Statistical Analysis

To carry out the exploratory factorial analysis, half of the total sample was used. The empirical variables of the thirteen questions of the instrumental perceived social support instrument and the same number of emotional social support were included in the analyses. The SPSS v 26 (IBM Corp., SPSS Statistics 26.0, Armonk, NY, USA) statistical package was used, data reduction module and scales, including KMO measures, Bartlett sphericity test, determinant, chi-square goodness of fit test; initial solution, rotated solution; extraction by the maximum likelihood method, with direct oblmin rotation; observation of load graphs and sedimentation graphs for the confirmation of latent variables; calculations of average variances extracted; obtaining pattern matrices and intercorrelations between latent variables.

Once the pattern matrices (or factor matrices) were obtained, the calculations in Excel were used to obtain the composite reliabilities or MacDonaldis omegas, which must be greater than 0.70; the average variances extracted (convergent validity), which must be greater than 0.50; and square root of the convergent validity or average variance extracted (discriminant validity), which are higher than the intercorrelations between the latent factors.

For the calculation of reliability by internal consistency, that is, considering all the elements of the scale, the Scales module of SPSS v 26 was used, obtaining Cronbach's alpha coefficients for each scale and for the entire scale, as well as their standardized values, analyzing the intercorrelations between the items, and the value of the alphas if items were eliminated.

The Confirmatory Factorial Analysis (CFA) was performed from the pattern or factorial matrices obtained in the EFA, with the other half of the total sample, using the AMOS v26. For its transformation, Gazkin plugins were implemented; in this case, the Matrix Builder Patterns for AMOS (http://statwiki.gaskination.com/index.php?title=Main_Page, accessed on 1 July 2022).

Missing values were resolved by removing data pairs from the analysis when participants did not complete all items on the questionnaire. The level of significance (risk α) was set at 5% ($\alpha = 0.05$).

3. Results

3.1. Sociodemographic Analysis

The analysis of the sociodemographic data of the respondents is shown in Figure 1. A total of 30.2% ($n = 608$) were male, and 69.8% ($n = 1405$) were female. The mean and median age of participants was 33.9 and 26.0 years, respectively ($SD = 16.01$; $IQR = 25$), with a range of 10 to 85 years. The participants who reported receiving instrumental and emotional supports were 4.6% ($n = 86$) and 44.4% ($n = 811$), respectively.

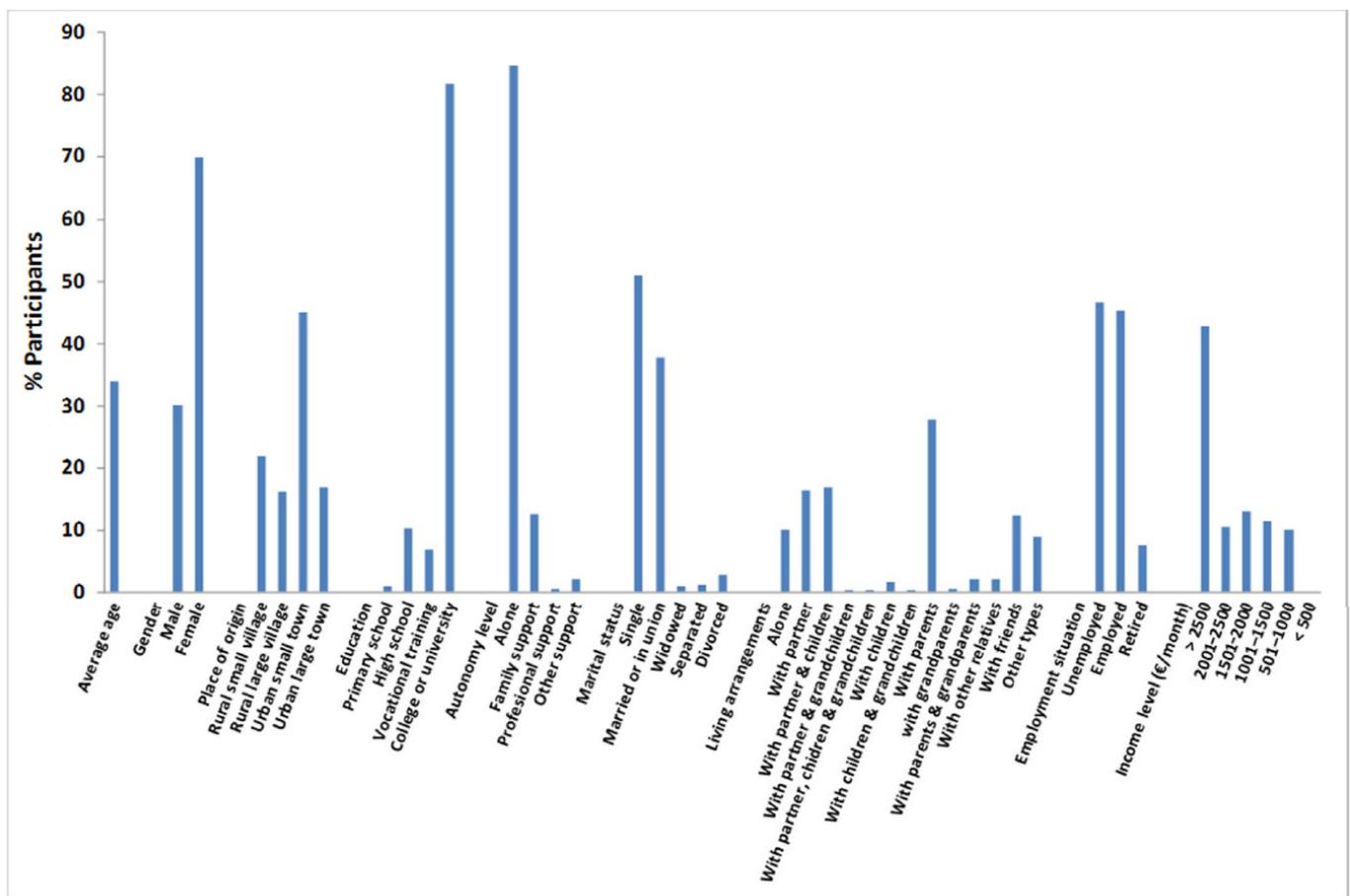


Figure 1. Sociodemographic characteristics of the participants in the study.

Regarding the place of origin, it is quite distributed, although more than 60% are from urban areas. In education, 81.7% have university studies. Further, 84.7% of the participants are completely autonomous, and 50.95% are single. In relation to living arrangements, 27.9% live with their parents, with a wide variety of situations. Regarding the employment situation of the participants, 46.6% are unemployed and 45.4% have a job. Finally, the level of monthly income is relatively high, with 42.8% of the participants at over EUR 2500 (Figure 1).

3.2. Instrument Validation

3.2.1. Exploratory Factor Analysis (EFA)

Perceived Social Support (PSS)

The Exploratory Factor Analysis, using half of the sample, with the instrument that evaluates perceived social support (PSS), yields two latent variables or factors, corresponding to instrumental support (PSS-Instrumental) and emotional support (PSS-Emotional); both for sustainability. The sampling adequacy test yields a Kaiser–Meyer–Olkin (KMO) measure of 0.919, and a Bartlett sphericity test that gives highly statistically significant $p < 0.001$, as well as the goodness of fit test $p < 0.001$. This confirms and justifies the pertinence and relevance of the exploratory factorial analysis carried out. These two factors or latent variables explain 56.54% of the total variance. These results indicate adequate construct validity adjusted to the content validity of the original design from which the measurement instrument was based.

The MacDonalds omega or composite reliability of instrumental perceived social support gave a coefficient of 0.943; the average variance extracted (convergent validity) was 0.57; and the discriminant validity (square root of the AVE) was 0.755, which is much higher than the intercorrelations between the factors (0.22). Therefore, the composite reliability, the convergent validity and the discriminant validity of the instrument are confirmed.

Internal consistency reliability for instrumental perceived social support was a standardized Cronbach's alpha of 0.933 and 0.942. For social emotional support, a Cronbach's alpha of 0.921, and standardized of 0.92. The total of the social support scale was 0.901, and standardized 0.919. Therefore, reliability by internal consistency, that is, considering the elements of the scale, seems adequate.

Psychoeducational Profiles

For the scales of the psychological pattern variables, the data support construct validity, internal consistency reliability (considering the items of the scales), composite or MacDonalds omega reliability (considering the latent factors of the scales), convergent validity (mean variance extracted), as well as discriminant validity (square root of the AVE), since they are greater than the intercorrelations between the scales.

We can identify a general factor for each of the measured constructs: emotion management, EM; motivation, MOT; self-efficacy, SE; social support SS.

The KMO sampling adequacy measure is high (KMO-EI = 0.957; KMO-SE = 0.973; KMO-SD = 0.942) except for MOT (KMO = 0.70). The statistical significance of the determinants of the intercorrelations between the initial indicators for the extraction of latent factors are highly significant ($p < 0.001$ for EI, SE, SD; 0.027 for MOT); this coincides with the significance of the Bartlett sphericity tests and with the goodness of fit tests; in all cases, highly statistically significant.

The composite skills or omegas of McDonalds are very high (CR-EM = 0.983; CR-MOT = 0.944; CR-SE = 0.997; CR-SS = 0.982). The extracted average variances are also very high (AVE-EM = 0.897; AVE-MOT = 0.851; AVE-SE = 0.977; AVE-SS = 0.888). Therefore, the convergent validity is evidenced, as well as the composite reliability.

Internal consistency reliability also provides very high Cronbach's alpha coefficients (EM = 0.983; MOT = 0.928; SE = 0.997; SS = 0.981).

3.2.2. Confirmatory Factor Analysis (CFA)

The Confirmatory Factor Analysis CFA indicates the adjustment of the EFA, relative to the scales used, perceived social support, PSS; emotion management, EM; motivation, MOT; self-efficacy, SE; social support, SS. Specifically, the coefficients for NFI, TLI, and CLI are greater than 0.90; the RMSEA is below 0.08. Likewise, Gazkin's plugin of validity and reliability tests confirmed the composite reliability, the average variance extracted (convergent validity), and the discriminant validity. The illustration of the measurement model for PSS is included in Figure 2.

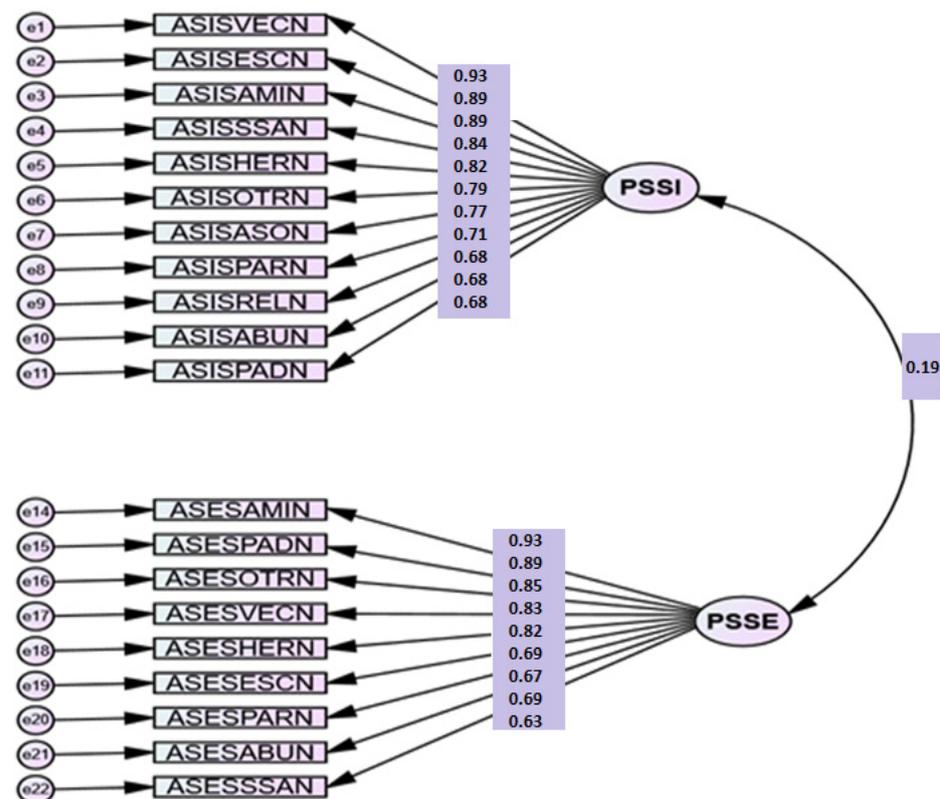


Figure 2. Illustration of the measurement model based on the CFA for the PSS perceived social support scale, with two latent variables or factors, one for instrumental support (PSSI), and one for emotional support (PSSE).

3.3. Instrumental and Emotional Supports for Sustainability of the Participants

We examined whether the receipt of instrumental and emotional supports for sustainability was associated with the sociodemographic variables of the survey participants. The results of the Pearson's chi-square analysis are provided in Table 1. Regarding their age, a very significant association was found with both instrumental and emotional supports of the participants. Older participants (≥ 40 years old) were the group of people who received these supports less frequently. The gender of the respondents was also strongly associated with emotional support, but only tended to be significant for the instrumental support. Thus, female participants received instrumental and emotional supports more commonly than men.

In relation to the educational level, the participants with college or university education received instrumental and emotional supports more frequently than those with a low level of education. This association was significant for the instrumental support, but not the emotional support received by the participants. We also found significant associations in relation to the employment situation and the income level of the participants. The emotional support, but not the instrumental support, received was significantly less frequent among the retired participants, and both instrumental and emotional supports among the participants with low-income level. This can be explained because in Spain, most older adults are no longer in the care of the family, but of institutions, which only provide instrumental support, attending to the basic health needs of these people, but not to more personal matters. Those who cannot afford a residence do not receive specific medical care, and they also have less contact with friends and family, who distance themselves more from these people.

Table 1. Association between the instrumental and emotional supports for sustainability received and the sociodemographic characteristics of the participants.

Variables	Instrumental Support				Emotional Support			
	No	Yes	χ^2	<i>p</i>	No	Yes	χ^2	<i>p</i>
	Frequency N (%)				Frequency N (%)			
Age (years)								
<22	451 (25.6)	40 (46.5)	20.691	0.001	228 (22.5)	252 (31.1)	38.904	0.001
22–39	678 (38.5)	30 (34.9)			366 (36.2)	334 (41.2)		
≥40	631 (35.9)	16 (18.6)			418 (41.3)	225 (27.7)		
Gender								
Male	548 (31.1)	19 (22.1)	3.106	0.078	349 (34.4)	217 (26.8)	12.161	0.001
Female	1216 (68.9)	67 (77.9)			667 (65.6)	594 (73.2)		
Place of origin								
Rural area	651 (36.9)	38 (44.2)	1.860	0.173	384 (37.8)	294 (36.3)	0.461	0.497
Urban area	1113 (63.1)	48 (55.8)			632 (62.2)	517 (63.7)		
Education								
Less than college or university	305 (17.3)	23 (26.7)	5.025	0.025	182 (17.9)	143 (82.1)	0.024	0.876
College or university	1459 (82.7)	63 (73.3)			834 (17.6)	668 (82.4)		
Autonomy level								
Alone	1528 (86.6)	57 (66.3)	27.650	0.001	904 (89.0)	661 (81.5)	20.498	0.001
Family/profesional/other support	236 (13.4)	29 (33.7)			112 (11.0)	150 (18.5)		
Marital status								
Single	868 (52.0)	52 (65.0)	5.200	0.074	489 (50.8)	415 (54.3)	2.155	0.340
Married or in union	705 (42.2)	25 (31.3)			417 (43.3)	308 (40.3)		
Widowed/separated/divorced	96 (5.8)	3 (3.8)			57 (5.9)	41 (5.4)		
Living arrangements								
Living alone/with children/with grandchildren	220 (12.5)	10 (11.6)	12.999	0.005	183 (13.6)	91 (11.2)	20.477	0.001
Living with a partner/with a partner and children and/or grandchildren	644 (36.5)	16 (18.6)			395 (38.9)	261 (32.2)		
Living with parents and/or grandparents/with other relatives	546 (31.0)	37 (43.0)			310 (30.5)	260 (32.1)		
Living with friends/other types	354 (20.1)	23 (26.7)	173 (17.0)	199 (24.5)				
Employment situation								
Unemployed	778 (44.1)	48 (55.8)	4.977	0.083	400 (39.9)	414 (51.0)	31.477	0.001
Employed	846 (48.0)	31 (36.0)			513 (50.5)	354 (43.6)		
Retired	140 (7.9)	7 (8.1)			103 (10.1)	43 (5.3)		
Income level (EUR/month)								
>2001	985 (55.8)	64 (74.4)	11.863	0.003	521 (51.3)	512 (63.1)	37.314	0.001
1001–2000	470 (26.6)	15 (17.4)			276 (27.2)	204 (25.2)		
<1000	309 (17.5)	7 (8.1)			219 (21.6)	95 (11.7)		

NOTE: N = number of participants, χ^2 = chi-square test, *p* = significance, α -Risk = 0.05.

In terms of their autonomy level, participants who needed family, professional or other support received instrumental and emotional supports for sustainability significantly less frequently than those who did not need any support.

3.4. Emotion Management of the Participants

Our survey included seven items about participants' abilities to manage their own and other people's emotions and the frequency reported by respondents of each item is

present in Figure 3 (upper left—emotion management). Most of the participants presented a high frequency when managing their emotions. The number of situations in which it was not achieved was very low.

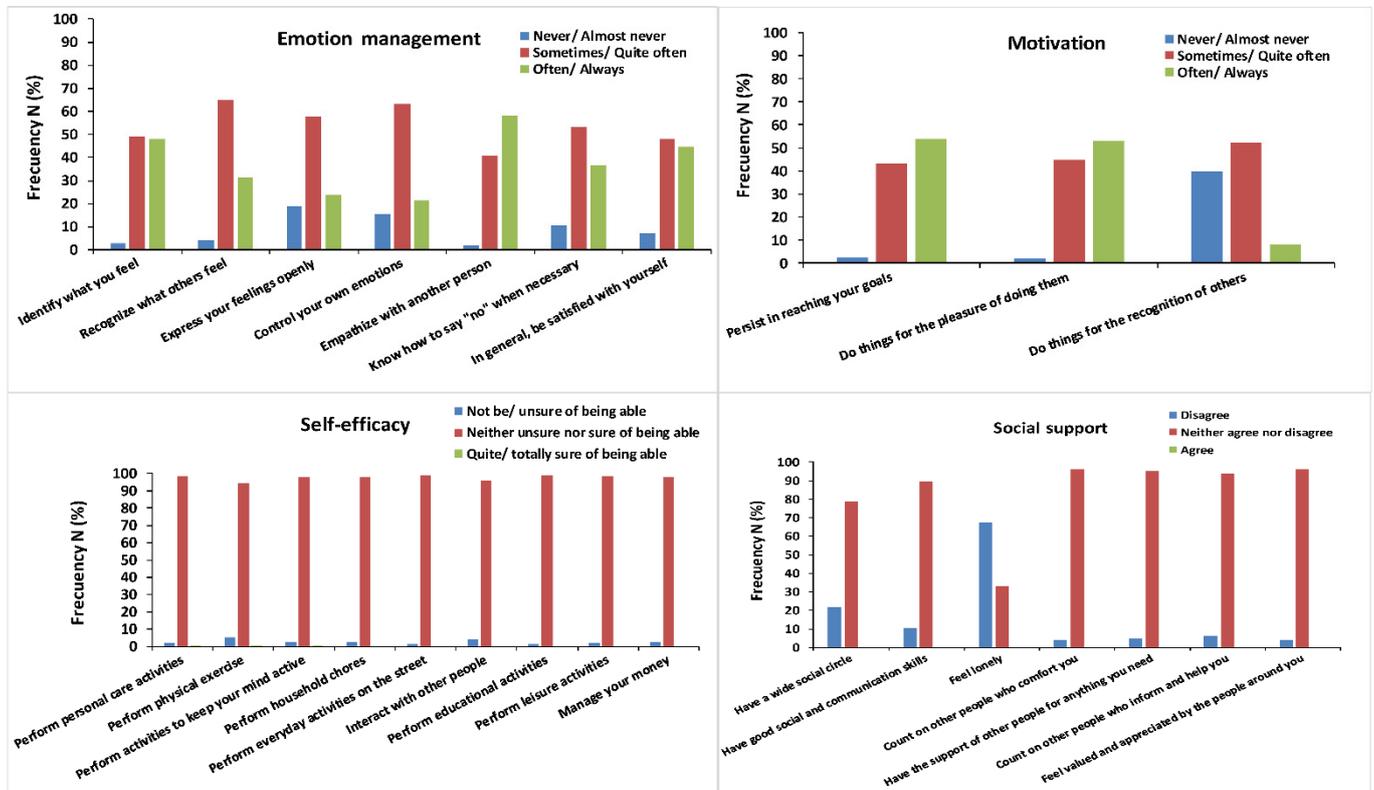


Figure 3. Frequency reported by participants about their emotion management, motivation, self-efficacy, and social support.

We analyzed the associations between the management of emotions and the sociodemographic characteristics of the participants (Table 2 and Supplementary Tables S1-1–S1-7). Older participants reported the ability to identify their feelings, express their feelings openly, control their own emotions, empathize with another person, know how to say “no” when necessary, and be satisfied with themselves significantly more frequently than participants in the youngest group (<22 years old). Female participants reported the ability to express their feelings openly, control their own emotions, and empathize with another person significantly more frequently than men.

Regarding marital status, widowed, separated or divorced participants were the group who reported significantly less frequently the ability to identify their feelings, recognize what others feel, express their feelings openly, and control their own emotions.

Unemployed or retired participants or with a low-income level also reported significantly less frequently these four items related to their emotion management.

Table 2. Association between the ability to manage emotions and the sociodemographic characteristics of the participants.

Variables	Identify What You Feel		Recognize What Others Feel		Express Your Feelings Openly		Control Your Own Emotions		Empathize with Another Person		Know How to Say “No” When Necessary		In General, Be Satisfied with Yourself	
	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>
Age (years)	25.782	0.001	7.963	0.093	27.687	0.001	14.845	0.005	9.527	0.049	16.905	0.002	13.155	0.011
Gender	0.386	0.825	5.247	0.076	10.414	0.005	16.852	0.001	22.055	0.001	1.021	0.600	0.543	0.762
Place of origin	21.119	0.001	13.531	0.001	3.270	0.195	0.145	0.930	0.871	0.647	3.208	0.201	2.055	0.358
Education	8.286	0.016	6.936	0.031	2.068	0.355	5.996	0.050	2.722	0.256	0.421	0.810	13.193	0.001
Autonomy level	6.419	0.040	4.131	0.127	0.990	0.610	4.741	0.093	2.136	0.344	0.001	0.999	2.214	0.331
Marital status	21.855	0.001	20.724	0.001	30.971	0.001	11.644	0.020	7.783	0.100	6.328	0.176	8.742	0.068
Living arrangements	19.537	0.003	6.959	0.325	34.580	0.001	14.102	0.029	5.001	0.544	6.715	0.348	17.355	0.008
Employment situation	16.800	0.001	4.276	0.118	5.811	0.055	8.669	0.013	0.244	0.855	0.425	0.809	3.589	0.166
Income level (EUR/month)	28.423	0.001	16.707	0.002	21.294	0.001	13.842	0.008	5.609	0.230	8.478	0.076	12.060	0.017

NOTE: χ^2 = chi-square test, *p* = significance, α -Risk = 0.05.

3.5. Motivations of the Participants

The frequencies reported by participants about the three items related to their motivations are shown in Figure 3 (upper right—motivation). Regarding persisting in reaching your goals and performing actions things for the pleasure of performing them, no more than 3% reported never or almost never performing them. Plus, only 8.1% of the participants reported performing actions for the recognition of others.

The associations with the sociodemographic characteristics of the participants are presented in Table 3 and Supplementary Figures S1–S3.

Table 3. Association between the motivations and the sociodemographic characteristics of the participants.

Variables	Persist in Reaching Your Goals		Do Things for the Pleasure of Doing Them		Do Things for the Recognition of Others	
	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>
Age (years)	9.313	0.054	8.230	0.081	5.449	0.224
Gender	0.303	0.859	1.997	0.368	2.741	0.254
Place of origin	0.641	0.726	0.144	0.930	1.801	0.406
Education	12.328	0.002	3.519	0.172	0.917	0.632
Autonomy level	13.396	0.001	6.983	0.030	0.378	0.828
Marital status	6.925	0.140	2.693	0.610	5.500	0.240
Living arrangements	6.084	0.414	5.149	0.525	11.127	0.086
Employment situation	2.703	0.259	1.568	0.457	1.633	0.442
Income level (EUR/month)	3.062	0.543	6.282	0.179	8.545	0.074

NOTE: χ^2 = chi-square test, *p* = significance, α -Risk = 0.05.

We found a significant association between the autonomy level of the participants and their motivations. Specifically, the participants who needed family, professional or other support reported significantly less frequently the ability to persist in reaching their goals and to perform actions for the pleasure of performing them. In relation to the educational level, the participants with low education were significantly less able to persist in reaching their goals.

3.6. Self-Efficacy of the Participants

Our survey included nine items related to participants' self-efficacy, whose reported frequencies are shown in Figure 3 (bottom left—self-efficacy). Most of the participants (>94%) were ambiguous in the nine items with their answers: neither unsure nor sure of being able to achieve it.

The associations of each self-efficacy item with the sociodemographic characteristics of the participants are presented in Table 4 and Supplementary Tables S2-1–S2-9.

Table 4. Association between self-efficacy and sociodemographic characteristics of the participants.

Variables	Perform Personal Care Activities		Perform Physical Exercise		Perform Activities to Keep Your Mind Active		Perform Household Chores		Perform Everyday Activities on the Street		Interact with Other People		Perform Educational Activities		Perform Leisure Activities		Manage Your Money	
	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>
Age (years)	2.990	0.560	2.005	0.735	2.402	0.662	6.797	0.033	1.903	0.386	10.335	0.006	1.706	0.426	3.658	0.161	10.537	0.005
Gender	2.532	0.282	4.186	0.123	2.231	0.328	10.153	0.001	0.245	0.620	0.583	0.445	1.7880	0.181	0.130	0.909	0.122	0.727
Place of origin	1.806	0.405	1.845	0.398	1.770	0.413	0.645	0.422	0.184	0.668	0.029	0.865	0.143	0.706	0.596	0.440	0.090	0.764
Education	5.087	0.079	1.551	0.461	10.892	0.004	7.702	0.006	3.182	0.074	3.573	0.059	0.083	0.773	0.125	0.723	1.802	0.179
Autonomy level	8.765	0.012	5.740	0.057	1.895	0.388	0.016	0.899	0.020	0.887	7.874	0.005	1.213	0.271	1.022	0.312	3.767	0.052
Marital status	2.556	0.635	1.084	0.897	1.094	0.895	3.087	0.214	2.402	0.301	7.884	0.019	3.196	0.202	1.961	0.375	2.912	0.233
Living arrangements	2.031	0.917	2.333	0.887	5.199	0.519	4.588	0.205	0.611	0.894	3.901	0.272	2.507	0.474	0.082	0.994	2.971	0.396
Employment situation	1.146	0.564	1.197	0.550	1.156	0.556	1.487	0.223	0.346	0.556	0.558	0.455	0.116	0.733	0.033	0.857	0.117	0.732
Income level (EUR/month)	5.041	0.283	5.374	0.251	4.982	0.289	2.435	0.296	2.544	0.280	2.736	0.255	1.994	0.369	1.675	0.433	2.919	0.232

NOTE: χ^2 = chi-square test, *p* = significance, α -Risk = 0.05.

We found that the self-efficacy reported by participants was significantly associated to their age and their autonomy level. Thus, younger participants were significantly less able to perform household chores, interact with other people, and manage their money. Regarding the autonomy level, participants who needed family, professional or other support reported less frequently the ability to perform personal care activities, and interact with other people in a significant way, but the association only tended to be significant for performing physical exercise and managing their money.

3.7. Social and Communication Skills and Social Support of the Participants

The frequencies reported by participants about the seven items related to their social and communication skills and social support are shown in Figure 3 (lower right—social support). Most of the participants were ambiguous in the seven items with their answers: neither agree nor disagree. Although 67.3% reported not feeling lonely.

The associations with the sociodemographic characteristics of the participants are presented in Table 5 and Supplementary Tables S3-1–S3-7.

Regarding the age of the participant, a significant association was found with the frequency of feeling lonely, with the extreme age groups (<22 and ≥ 40 years) being the ones that most frequently reported feeling lonely. The participants with higher educational level, singles, and people living alone also reported feeling lonely significantly more commonly than the other corresponding groups. Finally, the participants with low educational level, widowed, separated or divorced and with low-income level reported feeling valued and appreciated by the people around them less frequently in a significant way.

Table 5. Association between the social support for sustainability and the sociodemographic characteristics of the participants.

Variables	Have a Wide Social Circle		Have Good Social and Communication Skills		Feel Lonely		Count on Other People Who Comfort You		Have the Support of Other People for Anything You Need		Count on Other People Who Inform and Help You		Feel Valued and Appreciated by the People Around You	
	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>	χ^2	<i>p</i>
Age (years)	0.700	0.705	3.361	0.186	6.564	0.038	0.724	0.696	1.508	0.470	0.249	0.883	3.451	0.178
Gender	0.909	0.340	0.850	0.357	0.225	0.635	0.391	0.523	0.651	0.420	0.102	0.749	0.052	0.820
Place of origin	1.146	0.284	0.069	0.792	0.293	0.588	0.062	0.803	1.116	0.291	0.903	0.342	0.001	0.983
Education	2.604	0.107	2.991	0.084	5.335	0.021	2.374	0.123	1.418	0.234	1.580	0.209	11.693	0.001
Autonomy level	0.759	0.384	4.006	0.045	0.689	0.406	0.001	0.974	0.349	0.555	0.126	0.722	0.203	0.652
Marital status	1.422	0.491	2.535	0.282	9.967	0.007	0.194	0.908	0.910	0.635	2.159	0.340	8.670	0.013
Living arrangements	0.632	0.889	0.930	0.818	27.213	0.001	5.473	0.140	1.232	0.745	0.652	0.884	2.765	0.429
Employment situation	0.265	0.607	0.237	0.626	3.165	0.075	0.056	0.812	0.830	0.362	1.987	0.159	1.659	0.198
Income level (EUR/month)	0.621	0.733	1.967	0.374	5.334	0.069	0.008	0.996	0.435	0.804	0.255	0.880	6.335	0.042

NOTE: χ^2 = chi-square test, *p* = significance, α -Risk = 0.05.

3.8. Multivariate Analysis

Through the GLM module of SPSS v26 software, using age as a grouping variable, in its four intervals (18–29; 30–49; 50–64; >65 years) (Supplementary Table S4), and considering the Bartlett factorial scores of the scales as dependent variables (that is, the two factors of the perceived social support (PSS)), and each of the factors of the psychological constructs measured (emotion management, EM; motivation, MOT; self-efficacy, SE; social support, SS), statistically significant multivariate contrasts with small effect size are obtained [Wilks's lambda = 0.931, $F = 5.65$, $p < 0.001$, $\eta = 0.017$].

Tests for between-subject effects indicate that all six factors are statistically significant with low to medium effect size, ranging from $p < 0.001$ to 0.02. This is confirmed, in general, by the patterns analyzed and explained before, in which the items of each scale are analyzed, due to their value in identifying the differential patterns of interest. All of them are key to promoting sustainability.

4. Discussion

Although the instrument collects data from a wide range of ages, in our study, instrumental and emotional supports were significantly less prevalent among older participants, men, people with low educational level, those with low autonomy levels, retired people, and people with low-income levels, suggesting that these populations have a lower weight in terms of social engagement, so their productive role at the community level is also lower. Sustainability requires that intergenerational relationships be strengthened and attended to in order to optimize their functionality and undoubted beneficial effects by improving the weight of these populations with a smaller role in these connections.

In recent years, research in the social domain has shown that adults' perceptions of aging have important implications for their health and well-being [40,41]. However, less attention has been paid to the importance of socially active living in old age and its impact on the social participation of older adults [25]. Therefore, we aimed to investigate the prevalence of the instrumental and emotional supports received, and to examine various psychosocial characteristics (emotion management, motivation, self-efficacy, and social and communication skills) using an online survey completed by participants of any age and from different social groups, essential for promoting sustainability.

Older adults typically receive social support from family members, or health or social care professionals, but they also can provide various types of support to other people [5,42]. Older adults perform various productive tasks within the family, such as caring for grandchildren, caring for partners, and caring for the sick [14,42–44]. Moreover, older adults participate in productive activities in the household, such as housekeeping, cooking, or gardening [45,46]. In addition, adults who provide support and advice to family, neighbors, or friends in coping with problems or stressful life events have been identified as productive individuals in the community [44,47].

Older people who have fewer negative stereotypes about aging, understood as a period of social inactivity, appear to participate in social activities more often than those who have these age-related stereotypes and believe they are too old for social activities [48]. At the same time, people who participate in social activities with younger people and other active older adults may experience a high potential to play meaningful social roles and improve their social participation, leading to a more positive view of their own aging. Recently, [49] investigated the bidirectional relationships between age-related perceptions and formal and informal social participation. They found that adults with more positive perceptions of aging were more likely to participate more actively in social life, in both informal and formal settings. Furthermore, they found that informal social participation in all age groups was associated with better perceptions of old age, but not formal social participation. These findings suggest that positive expectations about aging may encourage adults to maintain a more engaged and socially productive lifestyle, and that informal social participation, characterized by the provision of advice and support to others, contributes to experiencing the aging process in a more positive way [49].

On the other hand, participation in socially productive activities is one of the most important determinants of successful and active aging [50]. Therefore, maintaining social engagement by engaging in meaningful activities improves the quality of life of older adults and at the same time, they can help others and contribute to society [25]. In this context, sociocultural characteristics of older adults, such as norms, values, civic culture, and social contexts, are considered as the macro-conditions that influence productive social engagement [51], and they motivate different types of productive activities, especially volunteering [43,52]. Moreover, personal capacity, including knowledge, experience, skills and abilities, interests, and desire to be productive, has been identified as human capital and is an important factor in productive social engagement. Thus, many researchers have found a significant relationship between older adults' personal capacities and their productive social roles [53–55]. In this sense, the motivations of the participants in our study, such as insisting on achieving their goals or conducting activities for the pleasure of conducting them, were less common among participants with low autonomy levels. In addition, younger participants and participants with low autonomy levels were significantly less likely to perform activities related to their self-efficacy.

Interest in social and human capital has increased significantly in recent years, and the link to sustainability is also becoming more apparent [56]. It is these findings that could be of interest to use for the links between the different fields analyzing social and human capital in relation to productivity and for the development of new ideas in the field of sustainability [56].

One consequence of productive social engagement is the improvement of the ability to deal with emotions. Engaging in productive activities has been shown to help older adults identify meaning in life and feel that they are useful in society [43,57]. Our survey data suggest that older and female participants are able to manage their own and other people's emotions significantly more frequently, while among the participants who were widowed, separated or divorced, unemployed or retired, and with a low-income levels, the ability to manage emotions was less prevalent. Finally, extreme age groups, people with higher educational level, singles, and those living alone were the groups significantly more likely to report feeling lonely.

The study has some limitations that need to be considered. The use of a self-administered survey and the fact that it is a voluntary sample could influence the results. Therefore, the motivation to complete the questionnaire and the level of digital literacy of the participants are factors that could have influenced the obtaining of the final sample. In addition, the sociodemographic, economic and educational characteristics of the sample might have played a role, limiting the generalizability of the results.

Another noteworthy fact is that subjects who were not independent in their activities of daily living were not included in the study, because they were unable to complete the online survey. Despite these described limitations, this study offers important insights into instrumental and emotional support and may contribute to the development of strategies to promote social participation in older adults.

Sustainability and Intergenerational Social Participation

This study provides various elements of connection between sustainability and intergenerational constructs, such as social and instrumental support, social participation, as well as the psychological patterns involved in the participants, although they are not direct measures of “sustainability” that should be deepened in future studies. Recent studies indicate that global measures and indices of intra and intergenerational equity are key to sustainable regional development [58]. It is clear that emotional and instrumental social support, as well as the analysis of psychological patterns and contextual variables, analyzed in this study contribute to understanding the need for actions that promote and enhance sustainability between generations. Where life expectancy has increased considerably in recent years, not only in Spain, the age of incorporation into working and adult life of the young generations has been greatly delayed due to training needs in a complex world that requires interaction between people of all ages (from 1 to 99 years); it is thus evident that social, emotional and instrumental support between generations greatly affects the possibilities of sustainability and the quality of social participation in different countries, specifically the evidence of this study on Spain, comparable to other European countries and, in many respects, to other countries of the world. For example, a recent study shows the key role of intergenerational support for access to home ownership, a key issue for independence and life projects for future generations in Hungary [59], which is similar to what happens in Spain, or in other countries. Another example is the case of the deep transformations that have taken place in recent years of sustainable urbanization of the population; as in the Spanish case, the Chinese case is paradigmatic, representing intergenerational support and intergenerational social participation, crucial in this transformation, are sustainable [60], or referring to intergenerational occupational mobility and sustainability [61]. The sustainability of the profound changes that have taken place in the world (increased urbanization, drastic reduction in the rural population), changes in habits due to new needs, such as the need to care for grandchildren in which the older generations represent a key role in making possible the work of both parents, which gives a new impetus to the sustainability of women’s options in this access to a sustainable and fair world. All of this requires instrumental and emotional social support between generations. New learning needs require intergenerational support for sustainability, just as new needs have shown unexpected changes, such as the COVID-19 pandemic, as illustrated by the synergy produced by intergenerational actions in increasing commitment to work [62]; or, with the increase in the need for virtualization of joint intergenerational action for sustainability and the key role of the elderly in support and social participation with the younger and adult generations [63], including the essential role of sustainability of artificial intelligence, in increasing intergenerational social justice [64]. The evidence provided by the current study with the Spanish sample, related to the constructs analyzed, and the illustrations of the previous studies, reflect their role in the sustainability of intergenerational relationships and the need to promote them to increase the potential for a sustainable and fair world.

5. Conclusions

Older adults' social participation for sustainability through engaging in productive role activities, particularly with people of other ages, has been shown to improve their quality of life and social and communication skills. Our study sheds light on the prevalence of receiving instrumental and emotional supports in a Spanish population, and how these affect the social engagement of different age and social groups. Therefore, it is noteworthy that these results contribute to the identification of sociocultural characteristics of adults with low participation in society. This is critical for governments and institutions to develop useful strategies to promote social participation for a sustainable world and related benefits for older adults and people of other ages.

The ultimate goal of this work is that implementation of the ideas proposed here can promote sustainable human and social capital development in the community, for a fairer and more sustainable world.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study, through the app used, before all subjects were enrolled in our study.

Data Availability Statement: The datasets generated for this study are available on request to the corresponding author.

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References

1. World Health Organization (WHO). Decade of Healthy Ageing: Baseline Report Geneva. 2020. Available online: <https://www.who.int/publications-detail-redirect/9789240017900> (accessed on 1 July 2022).
2. Foreman, K.J.; Marquez, N.; Dolgert, A.; Fukutaki, K.; Fullman, N.; McGaughey, M.; Pletcher, M.A.; Smith, A.E.; Tang, K.; Yuan, C.W.; et al. Forecasting life expectancy, years of life lost, and all-cause and cause-specific mortality for 250 causes of death: Reference and alternative scenarios for 2016–40 for 195 countries and territories. *Lancet* **2020**, *392*, 2052–2090. [[CrossRef](#)]
3. Fakoya, O.A.; McCorry, N.K.; Donnelly, M. Loneliness and social isolation interventions for older adults: A scoping review of reviews. *BMC Public Health* **2020**, *20*, 129. [[CrossRef](#)] [[PubMed](#)]
4. Wilson, C.A.; Saklofske, D.H. The relationship between trait emotional intelligence, resiliency, and mental health in older adults: The mediating role of savouring. *Aging Ment. Health* **2018**, *22*, 646–654. [[CrossRef](#)] [[PubMed](#)]
5. Gradaille, R.; Caride, J.A.; Caballo, M.B. Construyendo ocios intergeneracionales, entre la vida y la escuela. *Psychol. Soc. Educ.* **2021**, *13*, 27–38. [[CrossRef](#)]
6. Grootaert, C.; van Bastelaer, T. *Understanding and Measuring Social Capital: A Multidisciplinary Tool for Practitioners. Directions in Development*; World Bank: Washington, DC, USA, 2002.
7. De Silva, M.J.; McKenzie, K.; Harpham, T.; Huttly, S.R. Social capital and mental illness: A systematic review. *J. Epidemiol. Community Health* **2005**, *59*, 619–627. [[CrossRef](#)]
8. Kondo, N.; Sembajwe, G.; Kawachi, I.; van Dam, R.M.; Subramanian, S.V.; Yamagata, Z. Income inequality, mortality, and self-rated health: Meta-analysis of multilevel studies. *BMJ* **2009**, *339*, b4471. [[CrossRef](#)] [[PubMed](#)]

9. Gilbert, K.L.; Quinn, S.C.; Goodman, R.M.; Butler, J.; Wallace, J. A meta-analysis of social capital and health: A case for needed research. *J. Health Psychol.* **2013**, *18*, 1385–1399. [[CrossRef](#)]
10. Settersten, J.; Richard, A.; Hagestad, G.O. Subjective aging and new complexities of the life course. *Annu. Rev. Gerontol. Geriatr.* **2015**, *35*, 29–53. [[CrossRef](#)]
11. Hagestad, G.O.; Uhlenberg, P. The social separation of old and young: A root of ageism. *J. Soc. Issues* **2005**, *61*, 343–361. [[CrossRef](#)]
12. Ory, M.; Hoffman, M.K.; Hawkins, M.; Sanner, B.; Mockenhaupt, R. Challenging aging stereotypes: Strategies for creating a more active society. *Am. J. Prev. Med.* **2003**, *25*, 164–171. [[CrossRef](#)]
13. Rowe, J.W.; Kahn, R.L. Successful aging 2.0: Conceptual expansions for the 21st century. *J. Gerontol. B Psychol. Sci. Soc. Sci.* **2015**, *70*, 593–596. [[CrossRef](#)] [[PubMed](#)]
14. Valdemoros, M.A.; Alonso, R.A.; Sáenz de Jubera, M.; Ponce de León, A.; Sanz, E. Intergenerational leisure and family reconciliation. *Psychol. Soc. Educ.* **2021**, *13*, 1–13. [[CrossRef](#)]
15. González-Bernal, J.; De la Fuente, R. Relevancia psico-socio-educativa de las relaciones generacionales abuelo-nieto. *Rev. Esp. Pedagog.* **2008**, *239*, 103–118.
16. González-Bernal, J.J.; González-Santos, J.; González-Bernal, N.; Marquínez, S. Análisis de las actividades que realiza el abuelo o la abuela con nieto-nieta según el sexo y la edad del nieto o nieta. *INFAD Rev. Psicol.* **2009**, *1*, 443–452.
17. Tyszkowa, M. The role of grandparents in the development of grandchildren as perceived by adolescents and young adults in Poland. In *The Psychology of Grandparenthood: An International Perspective*; Smith, P.K., Ed.; Routledge: London, UK, 2005; pp. 49–65. [[CrossRef](#)]
18. Caballo, M.B.; Varela, L.; Martínez, R. La educación familiar del ocio una responsabilidad compartida. In *Tiempos, Educación y Ocio en Una Sociedad de Redes*; Caride, J.A., Caballo, M.B., Gradañe, R., Eds.; Octaedro: Barcelona, Spain, 2020; pp. 123–138. [[CrossRef](#)]
19. Sciplino, C.; Kinshott, M. Adult grandchildren’s perspectives on the grandparent-grandchild relationship from childhood to adulthood. *Educ. Gerontol.* **2019**, *45*, 134–145. [[CrossRef](#)]
20. Bedard, C.A. Longitudinal study of sport participation and perceived social competence in youth. *J. Adolesc. Health* **2020**, *66*, 352–359. [[CrossRef](#)]
21. Cambero, S.; Rangel, N. Aprendizaje intergeneracional en contextos familiares y socio-educativos. Estudio de caso en la comarca extremeña de Sierra Suroeste. *Int. J. Sociol. Educ.* **2020**, *9*, 1–33. [[CrossRef](#)]
22. Gaskin, C.J.; Orellana, L. Factors associated with physical activity and sedentary behavior in older adults from six low- and middle-income countries. *Int. J. Environ. Res. Public Health* **2018**, *15*, 908. [[CrossRef](#)]
23. Lasota, M. What do children learn from their parents and what from their grandparents? Changes in the perception of gender and family roles as seen from the developmental perspective. *Procedia Soc. Behav. Sci.* **2015**, *174*, 2467–2472. [[CrossRef](#)]
24. Megías, I.; Ballesteros, J.C. *Abuelos y Abuelas . . . Para Todo: Percepciones en Torno a la Educación y el Cuidado de Los Nietos*; Fundación de Ayuda contra la Drogadicción (FAD): Madrid, Spain, 2011. [[CrossRef](#)]
25. Monteagudo, M.J.; San Salvador del Valle, R.; Villatoro, F.; Elsen, C. When leisure is a central value for elderly people: A reading from narrative research. *Psychol. Soc. Educ.* **2021**, *13*, 15–26. [[CrossRef](#)]
26. Adams, K.B.; Leibbrandt, S.; Moon, H. A critical review of the literature on social and leisure activity and well-being in later life. *Ageing Soc.* **2011**, *31*, 683–712. [[CrossRef](#)]
27. Chang, P.J.; Wray, L.; Lin, Y. Social relationships, leisure activity and health in older adults. *Health Psychol.* **2014**, *33*, 516–523. [[CrossRef](#)] [[PubMed](#)]
28. Nimrod, G. In support of innovation theory: Innovation in activity patterns and life satisfaction among recently retired individuals. *Ageing Soc.* **2008**, *28*, 831–846. [[CrossRef](#)]
29. Chen, Y.M. Perceived barriers to physical activity among older adults residing in long-term care institutions. *J. Clin. Nurs.* **2010**, *19*, 432–439. [[CrossRef](#)] [[PubMed](#)]
30. Janke, M.C.; Nimrod, G.; Kleiber, D.A. Leisure activity and depressive symptoms of widowed and married women in later life. *J. Leis. Res.* **2008**, *40*, 250–266. [[CrossRef](#)]
31. Hutchison, S.L.; Nimrod, G. Leisure as a resource for successful aging by older adults with chronic health conditions. *Int. J. Aging Hum. Dev.* **2012**, *74*, 44–65. [[CrossRef](#)]
32. Jaumot-Pascual, N.; Monteagudo, M.J.; Kleiber, D.A.; Cuenca, J. Gender Differences in Meaningful Leisure Among Older Adults: Joint Displays of Four Phenomena. *Front. Psychol.* **2018**, *9*, 1450. [[CrossRef](#)]
33. Lennarston, C.; Silverstein, M. Does engagement with life enhance survival of elderly people in Sweden? The role of social and leisure activities? *J. Gerontol. B Psychol. Sci. Soc. Sci.* **2001**, *56*, S335–S342. [[CrossRef](#)]
34. Lardiés-Bosque, R.; Rojo Pérez, F.; Rodríguez Rodríguez, V.; Fernández Mayoralas, G.; Prieto-Flores Flores, M.E.; Ahmed Mohamed, K.; Rojo Abuín, M. Actividades de ocio y calidad de vida de los mayores en la Comunidad de Madrid. *Boletín Asoc. Geógrafos Españoles* **2013**, *63*, 323–348. [[CrossRef](#)]
35. Pinazo-Hernandis, S.; Torregrosa, M.; Jiménez-Martí, M.; Blanco, M. Participación social y satisfacción vital: Diferencias entre hombres y mujeres mayores. *Rev. Psicol. Salud* **2019**, *7*, 202–234.
36. Agahi, N.; Parker, M.G. Leisure activities and mortality: Does gender matter? *J. Aging Health* **2008**, *20*, 855–871. [[CrossRef](#)] [[PubMed](#)]

37. Canedo-García, A.; García-Sánchez, J.N.; Pacheco-Sanz, D.I. Benefits, Satisfaction and Limitations Derived from the Performance of Intergenerational Virtual Activities: Data from a General Population Spanish Survey. *Int. J. Environ. Res. Public Health* **2021**, *19*, 401. [[CrossRef](#)] [[PubMed](#)]
38. Canedo-García, A.; García-Sánchez, J.N.; Díaz-Prieto, C.; Pacheco-Sanz, D.I. Evaluation of the Benefits, Satisfaction, and Limitations of Intergenerational Face-to-Face Activities: A General Population Survey in Spain. *Int. J. Environ. Res. Public Health* **2021**, *18*, 9683. [[CrossRef](#)] [[PubMed](#)]
39. Canedo-García, A.; García-Sánchez, J.N.; Pacheco-Sanz, D.I. Acción conjunta intergeneracional (ACIG). Descripción de variables intervinientes. *Int. J. Dev. Educ. Psychology. Rev. Infad Psicol.* **2019**, *3*, 143–148. [[CrossRef](#)]
40. Han, J.; Richardson, V.E. The relationships among perceived discrimination, self-perceptions of aging, and depressive symptoms: A longitudinal examination of age discrimination. *Aging Ment. Health* **2015**, *19*, 747–755. [[CrossRef](#)]
41. Siebert, J.S.; Wahl, H.-W.; Schroder, J. The role of attitude toward own aging for fluid and crystallized functioning: 12-Year evidence from the ILSE study. *J. Gerontol. B Psychol. Sci. Soc. Sci.* **2018**, *73*, 836–845. [[CrossRef](#)]
42. Fernández-Ballesteros, R.; Zamarrón, M.D.; Díez-Nicolás, J.; López-Bravo, M.D.; Molina, M.A.; Schettini, R. Productivity in old age. *Res. Aging* **2011**, *33*, 205–226. [[CrossRef](#)]
43. Dosman, D.; Fast, J.; Chapman, S.A.; Keating, N. Retirement and productive activity in later life. *J. Fam. Econ. Issues* **2006**, *27*, 401–419. [[CrossRef](#)]
44. Hank, K.; Stuck, S. Volunteer work, informal help, and care among the 50+ in Europe: Further evidence for linked productive activities at older ages. *Soc. Sci. Res.* **2008**, *37*, 1280–1291. [[CrossRef](#)]
45. Fast, J.E.; Dosman, D.; Moran, L. Productive activity in later life: Stability and change across three decades. *Res. Aging* **2006**, *28*, 691–712. [[CrossRef](#)]
46. Horowitz, B.P.; Vanner, E. Relationships among active engagement in life activities and quality of life for assisted-living residents. *J. Hous. Elder.* **2010**, *24*, 130–150. [[CrossRef](#)]
47. Hinterlong, J.E. Productive engagement among older Americans: Prevalence, patterns, and implications for public policy. *J. Aging Soc. Policy* **2008**, *20*, 141–164. [[CrossRef](#)]
48. Robertson, D.A.; Kenny, R.A. “I’m too old for that”—The association between negative perceptions of aging and disengagement in later life. *Pers. Individ. Differ.* **2016**, *100*, 114–119. [[CrossRef](#)]
49. Schwartz, E.; Ayalon, L.; Huxhold, O. Exploring the Reciprocal Associations of Perceptions of Aging and Social Involvement. *J. Gerontol. B Psychol. Sci. Soc. Sci.* **2021**, *76*, 563–573. [[CrossRef](#)]
50. Levasseur, M.; Richard, L.; Gauvin, L.; Raymond, E. Inventory and analysis of definitions of social participation found in the aging literature: Proposed taxonomy of social activities. *Soc. Sci. Med.* **2010**, *71*, 2141–2149. [[CrossRef](#)] [[PubMed](#)]
51. Hank, K.; Erlinghagen, M. Dynamics of volunteering in older Europeans. *Gerontologist* **2010**, *50*, 170–178. [[CrossRef](#)] [[PubMed](#)]
52. Van der Meer, M. Productivity among older people in The Netherlands: Variations by gender and the socio-spatial context in 2002–03. *Ageing Soc.* **2006**, *26*, 901–923. [[CrossRef](#)]
53. Burr, J.A.; Mutchler, J.E.; Caro, F.G. Productive activity clusters among middle-aged and older adults: Intersecting forms and time commitments. *J. Gerontol. B Psychol. Sci. Soc. Sci.* **2007**, *62*, 267–275. [[CrossRef](#)]
54. Richard, L.; Gauvin, L.; Gosselin, C.; Laforest, S. Staying connected: Neighborhood correlates of social participation among older adults living in an urban environment in Montréal, Québec. *Health Promot. Int.* **2008**, *24*, 46–57. [[CrossRef](#)]
55. Caro, F.G.; Caspi, E.; Burr, J.A.; Mutchler, J.E. Global activity motivation and activities of older people. *Act. Adapt. Aging* **2009**, *33*, 191–208. [[CrossRef](#)]
56. Garrigos-Simon, F.; Botella-Carrubi, D.; González-Cruz, T. Social Capital, Human Capital, and Sustainability: A Bibliometric and Visualization Analysis. *Sustainability* **2018**, *10*, 4751. [[CrossRef](#)]
57. Baker, L.A.; Cahalin, L.P.; Gerst, K.; Burr, J.A. Productive activities and subjective well-being among older adults: The influence of number of activities and time commitment. *Soc. Indic. Res.* **2005**, *73*, 431–458. [[CrossRef](#)]
58. Cai, L.; Xu, Y.; Zhang, K.; Zhang, C.; Xiang, Z. A New Measurement of Global Equity in a Sustainability Perspective: Examining Differences from Space and Time Dimensions. *Sustainability* **2022**, *14*, 9769. [[CrossRef](#)]
59. Csizmadya, A.; Kószeghy, L. ‘Generation Rent’ in a Super Homeownership Environment: The Case of Budapest, Hungary. *Sustainability* **2022**, *14*, 8929. [[CrossRef](#)]
60. Shi, J.; Hua, W.; Tang, D.; Liu, F. Sustainable Community Transformation and Community Integration of Agricultural Transfer Population—A Case Study from China. *Sustainability* **2022**, *14*, 7737. [[CrossRef](#)]
61. Yu, A.; Liu, G.; Gao, Y. Intergenerational Occupational Mobility, Labor Migration and Sustained Demographic Dividends. *Sustainability* **2022**, *14*, 3110. [[CrossRef](#)]
62. Rožman, M.; Tominc, P.; Crnogaj, K. Healthy and Entrepreneurial Work Environment for Older Employees and Its Impact on Work Engagement during the COVID-19 Pandemic. *Sustainability* **2022**, *14*, 4545. [[CrossRef](#)]
63. Wang, C.-M.; Shao, C.-H.; Han, C.-E. Construction of a Tangible VR-Based Interactive System for Intergenerational Learning. *Sustainability* **2022**, *14*, 6067. [[CrossRef](#)]
64. Halsband, A. Sustainable AI and Intergenerational Justice. *Sustainability* **2022**, *14*, 3922. [[CrossRef](#)]