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ORIGINAL INVESTIGATION

Older adults' mentioned practices for coping with loneliness

Sara Marsillas[1] · **Eric Schoenmakers**[2]

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Abstract
In recent years, loneliness has been receiving increasing attention, yet there remains a lot to learn about how older adults cope with loneliness. In this study, the practices older adults consider for coping with loneliness and the relationship between various types of coping practices, loneliness, and personal resources are examined. Several hypotheses about the relationship between social and emotional loneliness, personal resources, and mentioning coping practices are formulated. Data was collected in Gipuzkoa (Basque Country, Spain) through structured interviews using a telephone survey among a representative sample of older adults aged 55 and over ($N = 894$). Results show that lonely and non-lonely respondents alike consider a few coping practices and prefer active and individual coping practices over social and passive ones for coping with loneliness. Experiencing emotional loneliness is related to mentioning more individual and active coping practices. Social coping practices were considered less often by respondents who experienced better self-rated health and more often by respondents with vision loss, a higher educational level and higher quality of life. In conclusion, while older adults differ in coping efforts they mention, these differences are only explained to a small extent by their experience of loneliness and available resources. For future research and practice development, a deeper understanding of the process of coping with loneliness is needed.

Keywords Loneliness · Coping · Older adults · Resources

Introduction

Across Western countries, between 10 and 50% of the older adult population reports feelings of loneliness (Hansen and Slagsvold 2016; Van Tilburg et al. 2004; Victor et al. 2005). In Spain, these figures vary between 9 and 39% (Díez Nicolás and Morenos Páez 2015; European Commission 2018); in Gipuzkoa, the prevalence of loneliness is 5.5% in people aged 55 years and over (Sancho et al. 2020). Studies show no clear evidence of an increase in the individual risk for loneliness among older adults over time (Dykstra 2009; Suanet and Van Tilburg 2019; Van Tilburg and Klok 2018), yet with population aging, the total number of older adults who feel lonely does increase. While some incidences of loneliness are chronic, others—and perhaps most—are transient or situational (Shiovitz-Ezra and Ayalon 2010; Zhong et al. 2016). Prevalence of loneliness at any given time combines both, suggesting that at any other given time, other individuals may experience transient loneliness. This implies that more persons have felt lonely at one time or another and thus have some experience in having to cope with this feeling. The aim of this paper is to explore the strategies that older adults mention for coping with loneliness and to study to what extent feelings of loneliness are related to the coping practices that older adults mention.

Loneliness is commonly defined as "a situation experienced by individuals as one where there is an unpleasant or inadmissible lack of (the quality of) certain social relationships" (De Jong Gierveld 1987). By this definition, loneliness is a negative experience, even though there is a range between 'unpleasant' and 'inadmissible'. Furthermore, loneliness is related to both quantity and quality of certain relationships, which highlights the existence of two types of loneliness, i.e., social loneliness originates from missing a broader group of contacts or an engaging social network and emotional loneliness, from missing an intimate figure or close emotional attachment (Weiss 1973). Social and emotional loneliness are distinct constructs (Dahlberg and

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✉ Sara Marsillas
sara.marsillas@matiafundazioa.eus

[1] Matia Gerontological Institute, Madrid, Spain

[2] Fontys University of Applied Sciences, Eindhoven, The Netherlands

McKee 2014; Hyland et al. 2019), one can be experienced without the other. Studies show that there are risk factors for both types of loneliness as well as for the separate types (Dahlberg and McKee 2014; Hyland et al. 2019; McHugh Power et al. 2020), e.g., being widowed and low well-being are risk factors for both types of loneliness, male gender, and low contact with friends and family are predictors of social loneliness, and high activity restriction and non-receipt of informal care, of emotional loneliness (Dahlberg and McKee 2014).

In recent years, many interventions with the goal to reduce loneliness have been developed and evaluated. Unfortunately, most have been found to be ineffective (Cattan et al. 2005; Cohen-Mansfield and Perach 2015; Masi et al. 2011; Victor et al. 2018). A possible explanation for the lack of success is that whilst loneliness is partly an intrapersonal experience and highly dependent on individual characteristics and preferences, most interventions are by nature generic (Schoenmakers 2013), addressing a wide group of people, both lonely and non-lonely to help them to solve a varied range of problems, including loneliness. There are common situational factors that trigger loneliness like divorce, widowhood, and loss of mobility (De Jong 1998; Heinrich and Gullone 2006; Savikko et al. 2005), yet there remain differences between individuals. One has to ask, why some persons confronted with, for instance bereavement become chronically lonely, while others do not. Part of the answer is that different people have different expectations, preferences, and resources that influence their experience of loneliness.

Coping with loneliness

People have different preferred and possible ways of coping with loneliness. Coping is referred to as an integral process, which includes all the efforts focused on managing external or internal demands and pressures, which are appraised by the individual as taxing or exceeding their own resources (Lazarus and Folkman 1984; Murphy 1974; Schoenmakers et al. 2012; Schoenmakers et al. 2015). During the life course, life events may occur and their accumulation can have negative effects on well-being and loneliness (Cacioppo et al. 2002; Cacioppo et al. 2006). Being able to manage these challenging situations requires the deployment of coping strategies in a way that facilitates positive or better outcomes. In this study, we set out to learn more about practices people mention for coping with loneliness. The research question of this study is: *To what extent are feelings of loneliness related to mentioning different practices for coping with loneliness.*

Research shows that there are many different ways of coping that people select when confronted with loneliness, obtaining diversity among the studies about the most used coping practices. Decades ago, Rubenstein and Shaver (1982) found that behavioral coping strategies, such as reading, listening to music, and contacting friends were the most frequent answers when people were questioned about what people do when they feel lonely. Additionally, they provided a classification composed of four main types of responses to loneliness, namely sad passivity (i.e., crying, sleeping, thinking, doing nothing), active solitude (i.e., working, listening to music, exercising), spending money, and having or seeking social contact. Rokach and Brock (1998) expanded on this idea by asking college and university students as well as the general population what ways of coping they used when facing loneliness, resulting in six types of behavioral and mental coping behaviour, i.e., 'reflection and acceptance', 'self-development and understanding', 'social support network', 'distancing and denial', 'religion and faith', and 'increased activity'. 'Increased activity' and 'social support network' both emphasize an intention and effort to build social bridges through which a lonely person may reconnect to other people. Based on other studies (e.g., Carstensen et al. 2003; Rubenstein and Shaver, 1982) it may be expected that these are the most helpful ways for coping with loneliness. However, Rokach and Brock (1998) found that 'reflection and acceptance' was the most successful coping strategy by which people get to know themselves in solitude and focus on understanding the causes and implications of loneliness.

Others took a more conceptual perspective on coping with loneliness, relating the definition of loneliness (De Jong 1998) with coping theory (Lazarus and Folkman 1984). In coping theory a common distinction is made between problem-focused coping, i.e., all active efforts to manage stressful situations and alter the troubled person-environment relationship to modify or eliminate the sources of stress through one's own behavior and emotion-focused coping, i.e., all the regulative efforts to diminish the emotional consequences of stressful events (Carver et al. 1989; Lazarus and Folkman 1984). With regard to loneliness, efforts to actively improve or increase social relationships can be considered as problem-focused. Efforts oriented to diminish its emotional consequences can be considered as emotion-focused (Bouwman et al. 2017; Schoenmakers et al. 2012; Schoenmakers et al. 2015). Previous research has shown that more lonely older adults considered emotion-focused coping more often than non-lonely older adults of coping with loneliness (Schoenmakers et al. 2012), but neither a preference for problem-focused nor emotion-focused coping resulted in lower levels of loneliness over time (Schoenmakers et al. 2015), nor in the intervention (Bouwman et al. 2017).

A recent model developed by Kharicha et al. (2018) about managing loneliness in older ages proposes that coping styles can be organized along two dimensions in which strategies could be represented, i.e., from prevention and action to acceptance or endurance, and from coping alone

to coping with, or in reference to others. With regard to the first dimension, one could argue that strategies focused on prevention and action are more problem-focused, while strategies focused on acceptance or endurance are more emotion-focused. What they add in their model is the visual distinction that problem-focused and emotion-focused coping with loneliness can be done individually and socially. Preventive or active strategies to cope with loneliness individually include, for instance, strategies to stay active in order to shift the focus away from oneself and onto the outside world, maintain routines, and keep busy. Individual coping strategies focused on acceptance and endurance include, for instance, perceiving loneliness as inevitable, accepting loneliness, and acknowledging loneliness as a temporal state. Examples of preventive and active strategies for coping with loneliness with others are attempts to establish, maintain, nurture, or repair relationships, efforts to plan arrangements, and to position oneself in social situations. Lastly, social coping strategies focused on acceptance and endurance include, e.g., hiding loneliness, publically comparing oneself with others who are worse off, and focusing on 'collective well-being' rather than oneself (Kharicha et al. 2018).

Experiencing loneliness may influence the coping strategies that people mention. Studies show that loneliness and low social skills are related (Cacioppo et al. 2006; Jin and Park 2013) and loneliness is known to make people withdraw from social situations (Cacioppo et al. 2015), suggesting that experiencing loneliness will result in mentioning less social and active coping strategies and more individual and passive coping practices. However, for emotional loneliness, one might argue that emotionally lonely individuals can still have a larger social network to participate in and might mention employing it in social forms of coping. Therefore, we hypothesize that older adults experiencing social loneliness are less likely to mention social and active coping practices (hypotheses 1a, b) and more likely to mention individual and passive coping practices than those who do not feel socially lonely (hypotheses 1c, d) and that older adults who experience emotional loneliness are equally likely to mention social coping strategies (hypothesis 2a), less likely to mention active coping strategies (hypothesis 2b) and more likely to mention individual and passive coping practices than older adults who do not feel emotionally lonely (hypothesis 2c, d).

In coping theory, there is a proposed relationship between available resources and coping options (Bouwman 2019; Lazarus and Folkman 1984). People with better resources available will have more or better-coping options available as well, which may result in more positive outcomes with regard to the stressor. Heffer and Willoughby (2017) suggest that having more resources allows people to be more successful in alleviating their loneliness. In previous studies, results between different resources and loneliness have been shown. For instance, better health, more or qualitatively better social resources, higher socio-economic status, and experiencing more quality of life are known to have a positive effect on the incidence of loneliness (De Jong 1998; Heffer and Willoughby 2017; Heinrich and Gullone 2006; Luanaigh and Lawlor 2008). We propose that the relationships between resources and loneliness might partly be explained by available coping options. It is argued that active and social coping practices are better suited for coping with loneliness than passive or individual ones, as these are aimed at removing the stressor, rather than diminishing its effects (Carstensen et al. 2003). A previous study shows that older adults' favor active forms of coping for others who feel lonely (Schoenmakers et al. 2012). In line with these findings, we hypothesize those older adults with better resources mention social and active coping practices more often (hypotheses 3a, b) and individual and passive coping practices equally often than older adults with poorer resources (hypotheses 3c, d).

Methods

Sample

Data for this study was collected using a survey of a representative sample of community-dwelling residents aged 55 and over in Gipuzkoa (Basque Country, Spain; 713018 inhabitants, 36% of the total population). Structured interviews were conducted through computer-assisted telephone surveys based on a questionnaire. Sampling selection was performed through stratified random sampling considering geographic area and age group (55–64 years old, 65–69, and 80 and over) as the main criteria of stratification. Sample distribution followed a proportional method for territory strata and quotas according to age group (55–64; 65–79 and 80 and over) and gender were applied. The households in each stratum were chosen by random selection of those with one person aged 55 and over, only interviewing one person per household. Sample size was determined by the required level of disaggregation. The sample consists of 894 individuals (384 men and 510 women) who completed the questionnaire. The non-response rate was 42%. Anonymity and confidentiality of the answers were guaranteed and participation in the study was voluntary.

Measurements

Loneliness–loneliness was measured using the De Jong Gierveld loneliness scale (DJGLS; (De Jong and Kamphuls 1985; De Jong and Van Tilburg 1999). In this version of the scale, the eleven items have three response options: 'Yes', 'More or less', and 'No'. The two response options indicative

of loneliness were taken together. The number of loneliness scores was counted, resulting in values from 0 to 11. The DJGLS has been found to be a reliable measurement for loneliness in Spain (Buz and Adánez 2013; Buz et al. 2014; Tomás et al. 2017). For some analyzes, we categorized a scale score from 0 to 2 as not lonely, a score from 3 to 8 as mildly lonely, and a score from 9 to 11 as severely lonely (De Jong and Van Tilburg 1999). The DJGLS distinguishes between emotional loneliness (6 items) and social loneliness (5 items). The correlation between the two subscales is $r = 0.47$, which is between medium and large.

Coping—Respondents were asked 'what do you usually do when you feel lonely?', followed by 31 practices (yes/no) that one could pursue when feeling lonely. The coping practices were selected a priori, based on a literature review and questionnaires used to assess coping practices, mainly based on the questionnaire used for the survey from "The BBC Experiment" (Barreto et al. 2021). Based on the axes proposed by Kharicha et al. (2018), these practices were classified into categories, i.e., 'individual coping practices', 'social coping practices', 'active coping practices', and 'passive coping practices'. This classification means that each option is labeled into two categories, for instance, 'walking alone' is both an individual and active coping activity and 'call someone' is both a social and active coping activity. The distribution of coping practices across the categories is presented in Table 1.

Resources—Self-rated health was measured using the question 'How is your health in general?' with response options ranging from 1 'poor' to 5 'excellent'. Two missing values were replaced with the mean score. Furthermore, respondents were asked whether they experienced hearing loss, vision loss, incontinence, and memory loss (1) or not (0). Missings ($N = 5$ for vision loss, $N = 6$ for incontinence, $N = 7$ for hearing loss and memory loss) were recoded as 'no problems'. As a measure of social resources, respondents were asked 'how many people normally live in your house including you' (range = 1–7). Four missings were replaced by the mode, i.e., 2 persons. Two items were used to indicate socio-economic status. Educational level was measured in seven categories ranging from 'cannot read or write' to 'university or higher' and recoded into four categories 'no education' (0), 'primary education' (1), 'secondary education' (2) and 'professional education/ university' (3). Missings

Table 1 Number of respondents considering different coping practices

Social/active	*N*	Social/passive	*N*
Going for a walk (in company)	133		
Go to a bar or cafe	23		
Call someone	21		
Physical activity (in company)	12		
Go to retirement centres/centres for older adults	5		
Go to church	4		
Talk to neighbors	4		
Visit somebody	4		
Go shopping (in company)	2		
Connect to a (online) social network	2		
Invite somebody over	2		
Call social services (e.g., tele-alarm)	1		
Go to the General Practitioner	0		
Individual/active	***N***	**Individual/passive**	***N***
Reading or writing	256	Nothing (resignation)	6
Going for a walk (alone)	248	Wait for the sensation to pass	3
Listen to radio or watch television	198	Change my mind	3
Hobby	107	Talk with myself	2
Physical activity (alone)	40	Cry	1
Do domestic chores	28	Eat	0
Listen to music, sing, dance	22	Drink	0
Go shopping (alone)	14		
Walk the pet	5		
Pray	2		
Play with mobile phone	2		

(N = 10) were replaced by the median, i.e., secondary education. Satisfaction with household income was measured by the question: 'Taking into account all household income, as well as other assets (housing, savings, car, second residence, etc.), where would you economically place your household, not you personally, on a scale of 0–10?', where '0' indicates 'very low income household' and '10' 'very high'. Missings ($N = 49$) were replaced by the mean. Satisfaction with life was measured using the direct question 'Would you say your satisfaction with life as a whole is...' with response options ranging from 1 'poor' to 10 'excellent'. Missings ($N = 30$) were replaced by the mean. Age, gender (female vs. male) and marital status, i.e., co-living (married and other co-living), single, divorced, and widowed were used as control variables. One missing for marital status is replaced by the mode, i.e., co-living. Descriptive statistics are presented in Table 2.

Procedure

Correlations between the subscales of the DJGLS were calculated. In order to test our hypotheses, logistic regressions were used to test whether respondents used at least one social, individual or active coping option (1) or not (0). The category of passive coping practices was excluded as these practices were not used often enough to conduct the analysis ($M = 0.0$, SD = 0.1; $N = 15$). Hence the three '*d*' hypotheses regarding passive coping could not be tested. Each of the three logistic regression analysis consisted of three models. In the initial model (not presented) age, gender and marital status were entered. For marital status, separate variables for 'single', 'divorced', and 'widowed' were computed with the scores 'yes' and 'no' (0–1). Co-living is used as a reference category. In order to test hypotheses 1a–c and 2a–c regarding the coherence between social and emotional loneliness and coping practices, the scales for social and emotional loneliness were added to the analysis (Model 1). Because of the expected correlation between the two types of loneliness, both were added firstly in separate steps, i.e., first social then emotional loneliness and vice versa. For social and active coping practices this did not result in large changes in significant estimates, but it did for individual coping practices. We report this in the "Results" section. For reasons of brevity, we present a version of the analysis in Table 3, where both types of loneliness were added simultaneously. In order to test hypothesis 3a–c resources, i.e., health variables, social resources variables, and socio-economic status variables were added to the analyzes in a separate step (Model 2). Multicollinearity was checked and no issues occurred (VIF < 3.0 with the largest VIF for 'co-living', i.e., 2.7).

Table 2 Descriptive statistics ($N = 894$)

	N	%	*M*	SD
Age (55–98)			69.5	9.9
Female (vs. male)	510	57		
Educational level (0–3)			1.7	1.1
Co-living	520	58		
Single	116	13		
Divorced	40	5		
Widowed	218	24		
Household income (0–10)			5.9	1.4
Satisfaction with life (0–10)			7.5	1.6
Self-rated health (0–5)			3.8	0.8
Vision loss	393	44		
Hearing loss	219	25		
Incontinence	86	10		
Memory problems	106	12		
People living in the household including yourself (1–7)			2.1	1.0
Loneliness (0–11)			1.9	2.2
Social loneliness (0–5)			0.9	1.2
Emotional loneliness (0–6)			1.0	1.4
Social coping practices (0–3)			0.2	0.5
Individual coping practices (0–5)			1.0	1.0
Active coping practices (0–6)			1.3	1.1
Passive coping practices (0–1)			0.0	0.1

Results

The mean score on the loneliness scale (DJGLS) was 1.9 (SD = 2.2), respectively 0.9 (SD = 1.2) and 1.0 (SD = 1.4) for social and emotional loneliness, indicating 'not lonely' (Table 2). Thirty percent of the respondents were 'lonely' (DJGLS > 2), 22% experienced social loneliness, respectively 27% emotional loneliness (subscale for social, respectively emotional loneliness > 1). There was a significant positive correlation between the scales for social loneliness and emotional loneliness ($r = 0.47$, $p < 0.001$), indicating that if a respondent scores higher on one of the scales, he or she scores higher on the other scale as well.

Regarding the coping practices mentioned, Table 1 shows how coping practices are categorized over two axes, i.e., an individual-social axis and an active–passive axis. This shows that respondents mainly mention active coping practices, either individually or socially. Separate coping practices were mentioned ranging from 0 to 256 times. Five practices were mentioned more than hundred times, four are individual practices, i.e., reading or writing, going for a walk alone, listening to the radio or watching television, and practicing a hobby, and one involves others, i.e., 'going for a walk in company'. On average, respondents mentioned 1.5 coping practices. For social practices, this

Table 3 Logistic regression on social, individual, and active coping practices ($N = 894$; odds ratios and confidence intervals)

	Social coping practices		Individual coping practices		Active coping practices	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Age (55–98)	0.98 (0.96–1.00)	0.98 (0.96–1.00)	0.99 (0.98–1.01)	0.99 (0.98–1.01)	0.99 (0.97–1.00)	0.99 (0.97–1.00)
Female (vs. male)	1.11 (0.79–1.56)	1.18 (0.83–1.69)	1.02 (0.77–1.37)	1.06 (0.79–1.42)	1.07 (0.79–1.45)	1.13 (0.83–1.55)
Single[a]	0.98 (0.60–1.63)	0.94 (0.55–1.61)	1.58 (1.01–2.46)*	1.53 (0.95–2.25)	1.92 (1.18–3.13)*	1.93 (1.15–3.24)*
Divorced[a]	0.91 (0.40–2.05)	0.81 (0.34–1.91)	0.98 (0.50–1.93)	0.97 (0.48–1.95)	1.23 (0.59–2.55)	1.23 (0.58–2.60)
Widowed[a]	1.23 (0.81–1.99)	1.25 (0.77–2.03)	1.35 (0.91–2.00)	1.31 (0.87–1.97)	2.01 (1.31–3.09)**	2.02 (1.28–3.17)**
Social loneliness (0–5)	0.81 (0.68–0.96)*	0.81 (0.68–0.97)*	1.06 (0.93–1.22)	1.07 (0.93–1.23)	1.00 (0.86–1.16)	1.00 (0.86–1.16)
Emotional loneliness (0–6)	1.01 (0.88–1.15)	1.04 (0.91–1.20)	1.15 (1.03–1.30)*	1.15 (1.02–1.30)*	1.14 (1.01–1.30)*	1.15 (1.01–1.31)*
Selfrated health (0–5)		0.81 (0.65–1.01)		0.97 (0.81–1.17)		0.88 (0.72–1.08)
Vison loss		0.67 (0.47–0.94)*		0.99 (0.74–1.34)		0.90 (0.66–1.23)
Hearing loss		1.36 (0.90–2.04)		1.18 (0.83–1.67)		1.34 (0.92–1.95)
Incontinence		1.06 (0.58–1.94)		0.92 (0.56–1.52)		0.88 (0.52–1.50)
Memory problems		1.03 (0.59–1.79)		0.89 (0.57–1.39)		0.89 (0.55–1.44)
People living in household (1–7)		0.91 (0.74–1.11)		0.95 (0.81–1.12)		0.98 (0.82–1.17)
Educational level (1–3)		1.25 (1.06–1.48)**		1.12 (0.89–1.17)		1.06 (0.92–1.23)
Household income (0–10)		0.99 (0.87–1.13)		1.01 (0.96–1.20)		1.02 (0.91–1.15)
Satisfaction with life (0–10)		1.16 (1.03–1.31)*		0.98 (0.89–1.09)		1.02 (0.92–1.14)
Constant	1.01	0.72	2.06	1.83	4.43*	5.08
Nagelkerke R^2	0.02*	0.06*	0.03**	0.04	0.04	0.05

[a]Reference category is 'co-living'

Significance levels: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

was 0.2 (SD = 0.5; range = 0–3; Table 2), 1.0 for individual (SD = 1.0; range = 0–5), 1.3 for active coping (SD = 1.3; range = 0–6), and 0.0 for passive coping practices (SD = 0.1; range = 0–1). At least one social coping option was mentioned by 21% of the respondents, for individual, active and passive coping practices this was 64, 71, and 2%.

Six hypotheses about the relationships of social and emotional loneliness to the likelihood of mentioning social, individual, and active coping practices were tested. Results are shown in Table 3. Hypothesis 1a–c concerned the relationship between social loneliness and the likelihood of respondents mentioning social, individual and active coping practices. With regard to social coping practices, a negative relation between experiencing social loneliness was found, suggesting that experiencing social loneliness to a larger extent results in a smaller likelihood of mentioning social coping practices, thus accepting hypothesis 1a. Regarding individual coping practices, a significant relation to social loneliness (OR = 1.15, CI 1.01–1.30, $p < 0.05$) was found. It disappeared when adding emotional loneliness to the analysis, suggesting a larger impact of the latter. No relations between social loneliness and mentioned active coping practices were found. Hypotheses 1b and 1c are refuted. With regard to emotional loneliness, we expected to find no relationship to the likelihood of mentioning social coping practices (hypothesis 2a), a negative relationship to mentioning active coping practices (hypothesis 2b), and a positive relationship to individual coping practices (hypothesis 2c). Hypotheses 2a and 2c were confirmed. Hypothesis 2b is contradicted, emotional loneliness increases the likelihood of mentioning active coping practices.

Furthermore, hypotheses about the relationships of resources to mentioning coping practices were made, i.e., having better resources was expected to be positively related to the likelihood of mentioning social and active coping practices (hypotheses 3a, b), and resources were expected to have no relationship to the likelihood of mentioning individual and passive coping practices (hypothesis 3c). In line with hypothesis 3a, there is a significant negative relationship to experience vision loss and a positive relationship to educational level and satisfaction with life on mentioning social coping practices. Other variables regarding resources showed no significant relationships. Hypothesis 3a is partly confirmed. No significant relationship of resources were

found to the likelihood of considering individual and active coping practices, thus refuting hypothesis 3b regarding individual coping practices and confirming hypothesis 3c regarding individual coping practices.

In addition to the variables regarding the hypotheses, age, gender, and relational status were included in the analysis. Compared to married respondents, being single and being widowed increased the likelihood of mentioning active coping practices. Furthermore, compared to married respondents, single respondents considered individual coping practices more often (Table 3; Model 1), however, this relation disappeared after adding resources to the analysis (Table 3; Model 2). No other significant relationships of age, gender, or relational status to the likelihood of mentioning coping practices were found. The logistic regression analysis explained only a small part of the total variance in the extent to which respondents mentioned social, individual, and active coping practices (Nagelkerke $R^2 = 0.06$ for social coping practices, respectively Nagelkerke $R^2 = 0.03$ and Nagelkerke $R^2 = 0.05$ for individual and active coping practices).

Discussion

In this paper, we explored the extent to which feelings of loneliness and availability of personal resources are related to mentioning different practices for coping with loneliness. Based on the work of Kharicha et al. (2018) we distinguished four categories in which coping practices were classified, i.e., social, individual, active and passive. In general, older adults prefer active coping practices for coping with loneliness, both individually and socially, although there seems to be a slight preference for individual coping practices, is in line with some previous studies (Kharicha et al. 2018; Rokach and Brock 1998) and to some extent in contrast to others that suggested that older adults would mention diverse types of coping practices (Rook and Peplau 1982; Schoenmakers et al. 2012; Schoenmakers et al. 2015). Overall, our models show low levels of explained variance. Apparently, older adults' mentioned practices for coping with loneliness are not largely explained by experiences of loneliness or individual resources. Our results show that experiencing emotional loneliness is related to mentioning more individual and active coping practices, but not social coping practices. This suggests those older adults with emotional loneliness are trying to cope with loneliness by themselves, doing something active. While individual coping practices are not wrong, coping involving others is suggested to be better for addressing the experience of loneliness (Carstensen et al. 2003). Most of the loneliness interventions are based on the assumption that it is important for lonely persons to interact with others. However, older adults' mentions for coping with emotional loneliness do not seem to be in line with this idea. Feeling socially lonely is related to a lower likelihood of mentioning social coping practices, but not individual or active coping practices. While this result makes sense, i.e., those who feel socially lonely may not perceive a fulfilling social network to apply for social coping practices, it could also maintain the situation. Apparently, socially lonely older adults do not use or want to, practices for coping with others. This may in turn result in a continuation or worsening of their social loneliness and a downward spiral where loneliness results in more loneliness (Cacioppo et al. 2002; Cacioppo et al. 2015). Professionals working with lonely older adults should be aware of their coping preferences, either to match in or to question them.

Having better resources, i.e., no vision loss, a higher educational level, better self-rated health, and higher satisfaction with life, is related to a higher likelihood of mentioning social, but not individual or active coping practices for coping with loneliness. In other words, older adults with more resources are more likely to involve others when addressing their loneliness. While this makes sense in a way—those who have poorer resources have less options of acting in social ways and need a different approach for coping with loneliness—it is also worrisome. Social ways of coping are considered to be more effective than individual ways, both in general (Carstensen et al. 2003) and by older adults themselves when suggesting ways to cope with loneliness for lonely others (Schoenmakers et al. 2012) and those with poorer resources are less likely to consider social ways of coping and more likely to become lonely (De Jong 1998; Heffer and Willoughby 2017; Heinrich and Gullone 2006; Luanaigh and Lawlor 2008). This implies that interventions should support those with poorer resources in making social ways of coping more accessible to them while supporting them in individual ways of coping, keeping in mind that older adults who prefer to cope with loneliness individually might be less prone to ask for help (Kharicha et al. 2018). Research is needed in order to study how older adults can be supported to cope with loneliness in a better way and to what extent this support can be effective.

Compared to those who are married, older adults who are single or widowed are more likely to mention active coping practices. This may seem counter-intuitive. Having a partner is often a resource and having better resources was hypothesized to result in a higher likelihood of mentioning active coping practices (Bouwman 2019; Lazarus and Folkman 1984). A possible explanation is that single and bereaved older adults know they have to cope with loneliness by themselves, they do not have a partner to help them, and thus are more likely to become active themselves. Another interesting result is that there were no relationships found between relationship statuses and mentioning individual

coping practices. Apparently, having a partner or not is not related to preferences for coping with loneliness alone. This indicates that loneliness can be a private feeling, also among those with a partner, and is considered to be best coped with by oneself. In line with the findings of Kharicha et al. (2018), we suggest that when coping with loneliness, some people seek out solitary practices.

It is important to note that mentioning coping practices implies an intention for behavior, but the intention is not a sufficient condition for behavior to occur (De Ridder 1997; Sheeran 2002; Trafimow 2009). So, when confronted with loneliness, older adults may show different behavior than the practices they mention when asked. Possibly, in order to translate intentions into behaviour, professionals addressing loneliness could discuss coping preferences with their clients and try to support them in showing the preferred behaviour. However, we propose that many of the coping practices mentioned in this study may be not sufficient to reduce loneliness and may serve as a distraction. Loneliness is a complicated phenomenon and coping with it may require more methodological interventions. While it is worth considering a wide arrange of coping practices (Bouwman et al. 2017; Kharicha et al. 2018; Schoenmakers et al. 2012) it is important to tailor-make interventions that match the often complicated needs of the lonely individual (Bessaha et al. 2020; Fokkema and Van Tilburg 2007; Schoenmakers 2013).

This study has some inherent limitations. Firstly, the data for this study was collected in Gipuzkoa. Therefore, we have to be careful with generalizing these results to Spain or even larger still. Second, the coping practices included were selected a priori, based on a literature review and questionnaires used to assess coping practices, and a range of them were available to respond. However, this design has several limitations, such as it is incomplete. There are many more practices that can be used for coping with loneliness. Older adults could add their own practices through the option 'other practices' included at the end of the list, but different options were not often used. Moreover, no passive-social coping practices and only a few passive-individual ones were included in the questionnaire, limiting the options in the analyes. Furthermore, social desirability may have influenced the responses in some coping practices such as crying and drinking. Thirdly, due to the design of the study, i.e., telephonic interviews, the variables included in this study are self-reported responses. Perceptions can influence results (Fernández-Ballesteros 2011). In other words, older adults may present themselves in the way they want to see themselves, rather than in the way they truly are. A final limitation is related to the cross-sectional design of the research which does not permit establishing causal relationships among variables. Longitudinal data should be gathered and used to obtain better insight into the relationship between coping and loneliness.

Despite the limitations described, this study can be considered a step forward in the research on loneliness and coping, as these topics have scarcely been researched in this country. Findings are in line with previous studies, with regard to the preference for coping with feelings of loneliness without involving other people (Kharicha et al. 2018), the relationship between resources and coping practices mentioned (Schoenmakers et al. 2012), and the lack of significant relationship between coping practices and loneliness (Bouwman et al. 2017; Schoenmakers et al. 2015). The findings of the current and previous studies suggest that the complexity of the experiences of loneliness in older adults requires a more personalized and integral approach. In such an approach, there should be paid attention to personal coping preferences and resources as well as for the way a community can contribute to coping with loneliness by including older adults in societal life and socially connecting them within the community (Barke 2017; Kharicha et al. 2018).

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Declarations

Conflict of interest The authors declare they have no conflict of interests.

Availability of data and materials Data and material may be available by contacting authors.

References

Barke J (2017) Community-based research and approaches to loneliness prevention. Work Older People 21:115–123

Barreto M, Victor C, Hammond C, Eccles A, Richins MT, Qualter P (2021) Loneliness around the world: age, gender, and cultural differences in loneliness. 169:110066

Bessaha ML, Sabbath EL, Morris Z, Malik S, Scheinfeld L, Saragossi J (2020) A systematic review of loneliness interventions among non-elderly adults. Clin Soc Work J 48:110–125. https://doi.org/10.1007/s10615-019-00724-0

Bouwman TE, Aartsen MJ, van Tilburg TG, Stevens NL (2017) Does stimulating various coping strategies alleviate loneliness? Results from an online friendship enrichment program. J Soc Person Relat 34:793–811. https://doi.org/10.1177/0265407516659158

Bouwman TE (2019) Do resources and expectations play a role in the alleviation of loneliness. In: Coping in loneliness interventions: the online friendship enrichment program for people aged 50 years and over. Dissertation, VU University Amsterdam

Buz J, Urchaga D, Polo ME (2014) Factor structure of the de Jong Gierveld loneliness scale in Spanish elderly adults. An Psicol-Spain 30:588–596. https://doi.org/10.6018/analesps.30.2.148371

Buz J, Adánez GP (2013) Análisis de la Escala de Soledad de De Jong Gierveld mediante el modelo de Rasch. Univ Psychol 12:971–981 https://doi.org/10.11144/Javeriana.upsy12-3.aesd

Cacioppo JT et al (2002) Loneliness and health: potential mechanisms. Psychosom Med 64:407–417. https://doi.org/10.1016/j.socscimed.2011.11.028

Cacioppo JT, Hughes ME, Waite LJ, Hawkley LC, Thisted R, aging, (2006) Loneliness as a specific risk factor for depressive symptoms: cross-sectional and longitudinal analyses. Psychol Aging 21:140. https://doi.org/10.1037/0882-7974.21.1.140

Cacioppo S, Grippo AJ, London S, Goossens L, Cacioppo JT (2015) Loneliness: clinical import and interventions. Perspect Psychol Sci 10:238–249. https://doi.org/10.1177/1745691615570616

Carstensen LL, Fung HH, Charles ST (2003) Socioemotional selectivity theory and the regulation of emotion in the second half of life. Motiv Emot 27:103–123. https://doi.org/10.1023/A:1024569803230

Carver CS, Scheier MF, Weintraub JK (1989) Assessing coping strategies: a theoretically based approach. J Pers Soc Psychol 56:267. https://doi.org/10.1037/0022-3514.56.2.267

Cattan M, White M, Bond J, Learmouth A (2005) Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. Ageing Soc 25:41–67. https://doi.org/10.1017/S0144686X04002594

Cohen-Mansfield J, Perach R (2015) Interventions for alleviating loneliness among older persons: a critical review. Am J Health Promot 29:e109–e125. https://doi.org/10.4278/ajhp.130418-LIT-182

Commission European (2018) Special Eurobarometer 471 "Fairness, inequality and inter-generational mobility." European Commission, Brussels

Dahlberg L, McKee KJ (2014) Correlates of social and emotional loneliness in older people: evidence from an English community study. Aging Ment Health 18:504–514. https://doi.org/10.1080/13607863.2013.856863

De Jong Gierveld J (1987) Developing and testing a model of loneliness. J Pers Soc Psychol 53:119–128. https://doi.org/10.1037/0022-3514.53.1.119

De Jong Gierveld J (1998) A review of loneliness: concept and definitions, determinants and consequences. Rev Clin Gerontol 8:73–80. https://doi.org/10.1017/S0959259898008090

De Ridder D (1997) What is wrong with coping assessment? A review of conceptual and methodological issues. Psychol Health 12:417–431. https://doi.org/10.1080/08870449708406717

De Jong Gierveld J, Kamphuls F (1985) The development of a Rasch-type loneliness scale. Appl Psychol Meas 9:289–299. https://doi.org/10.1177/014662168500900307

De Jong GJ, Van Tilburg T (1999) Manual of the loneliness scale. VU University, Amsterdam

Díez Nicolás J, Morenos Páez M (2015) La soledad en España. Fundación ONCE y Fundación AXA, Madrid

Dykstra PA (2009) Older adult loneliness: myths and realities. Eur J Ageing 6:91–100. https://doi.org/10.1007/s10433-009-0110-3

Fernández-Ballesteros R (2011) Quality of life in old age: problematic issues. Appl Res Qual Life 6:21–40. https://doi.org/10.1007/s11482-010-9110-x

Fokkema CM, Van Tilburg TG (2007) Loneliness interventions among older adults: sense or nonsense. Tijdschr Gerontol Geriatr 38:185–203. https://doi.org/10.1007/bf03074846

Hansen T, Slagsvold B (2016) Late-Life loneliness in 11 European countries: results from the generations and gender survey. Soc Indic Res 129:445–464. https://doi.org/10.1007/s11205-015-1111-6

Heffer T, Willoughby T (2017) A count of coping strategies: a longitudinal study investigating an alternative method to understanding coping and adjustment. J PloS One 12:1–16. https://doi.org/10.1371/journal.pone.0186057

Heinrich LM, Gullone E (2006) The clinical significance of loneliness: a literature review. Clin Psychol Rev 26:695–718. https://doi.org/10.1016/j.cpr.2006.04.002

Hyland P et al (2019) Quality not quantity: loneliness subtypes, psychological trauma, and mental health in the US adult population. Soc Psychiatry Psychiatr Epidemiol 54:1089–1099. https://doi.org/10.1007/s00127-018-1597-8

Jin B, Park N (2013) Mobile voice communication and loneliness: cell phone use and the social skills deficit hypothesis. New Media Soc 15:1094–1111. https://doi.org/10.1177/1461444812466715

Kharicha K, Manthorpe J, Iliffe S, Davies N, Walters K (2018) Strategies employed by older people to manage loneliness: systematic review of qualitative studies and model development. Int Psychogeriatr 30:1767–1781. https://doi.org/10.1017/S1041610218000339

Lazarus RS, Folkman S (1984) Stress, appraisal and coping. Springer, New York

Luanaigh CÓ, Lawlor BA (2008) Loneliness and the health of older people. Int J Geriatr Psych 23:1213–1221. https://doi.org/10.1002/gps.2054

Masi CM, Chen H-Y, Hawkley LC, Cacioppo JT (2011) A meta-analysis of interventions to reduce loneliness. Pers Soc Psychol Rev 15:219–266. https://doi.org/10.1177/1088868310377394

McHugh Power J, Hannigan C, Hyland P, Brennan S, Kee F, Lawlor BA (2020) Depressive symptoms predict increased social and emotional loneliness in older adults. Aging Ment Health 24:110–118. https://doi.org/10.1080/13607863.2018.1517728

Murphy LB (1974) Coping, vulnerability, and resilience in childhood. In: Coelho GV, Hamburg DA (eds) Coping and adaptation. Basic Books, New York, pp 69–100

Rokach A, Brock H (1998) Coping with loneliness. J Psychol 132:107–127. https://doi.org/10.1080/00223989809599269

Rook KS, Peplau LA (1982) Perspectives on helping the lonely. In: Peplau LA, Perlman D (eds) Loneliness: a sourcebook of current theory, research and therapy. Wiley, New York, pp 351–378

Rubenstein C, Shaver P (1982) The experience of loneliness. In: Peplau LA, Perlman D (eds) Loneliness: a sourcebook of current theory, research and therapy. Wiley, New York, pp 206–223

Sancho (Coord.), Díaz-Veiga B, Prieto, MY (2020) Bakardadeak: explorando soledades entre laspersonas que envejecen en Gipuzkoa. Matia Fundazioa.https://www.matiainstituto.net/sites/default/files/archivospdf/bakardadeak_informe_completo.pdf. Accessed 30 June2021

Savikko N, Routasalo P, Tilvis RS, Strandberg TE, Pitkälä KH (2005) Predictors and subjective causes of loneliness in an aged population. Arch Gerontol Geriat 41:223–233. https://doi.org/10.1016/j.archger.2005.03.002

Schoenmakers EC, Van Tilburg TG, Fokkema T (2012) Coping with loneliness: what do older adults suggest? Aging Ment Health 16:353–360. https://doi.org/10.1080/13607863.2011.630373

Schoenmakers EC, Van Tilburg TG, Fokkema T (2015) Problem-focused and emotion-focused coping options and loneliness: how are they related? Eur J Ageing 12:153–161. https://doi.org/10.1007/s10433-015-0336-1

Schoenmakers EC (2013) Coping with Loneliness. Dissertation, VU Univeristy Amsterdam

Sheeran P (2002) Intention—behavior relations: a conceptual and empirical review. Eur Rev Soc Psychol 12:1–36. https://doi.org/10.1002/0470013478.ch1

Shiovitz-Ezra S, Ayalon L (2010) Situational versus chronic loneliness as risk factors for all-cause mortality. Int Psychogeriatr 22:455. https://doi.org/10.1017/S1041610209991426

Suanet B, Van Tilburg TG (2019) Loneliness declines across birth cohorts: the impact of mastery and self-efficacy. Psychol Aging 34:1134. https://doi.org/10.1037/pag0000357

Van Tilburg T, Klok J (2018) Trend in prevalentie van eenzaamheid onder ouderen (Trend of prevalence of loneliness among older adults). In: Van Campen C, Vonk F, Van Tilburg T (eds) Kwetsbaar en Eenzaam. (Vulnerable and Lonely). SCP, The Hague

Tomás JM, Pinazo-Hernandis S, Donio-Bellegarde M, Hontangas PM (2017) Validity of the de Jong Gierveld Loneliness Scale in Spanish older population: competitive structural models and item response theory. Eur J Ageing 14:429–437. https://doi.org/10.1007/s10433-017-0417-4

Trafimow D (2009) The theory of reasoned action: a case study of falsification in psychology. Theory Psychol 19:501–518. https://doi.org/10.1177/0959354309336319

Van Tilburg T, Havens B, De Jong Gierveld J (2004) Loneliness among older adults in the Netherlands, Italy, and Canada: a multifaceted comparison. Can J Aging 23:169–180. https://doi.org/10.1353/cja.2004.0026

Victor CR, Scambler SJ, Bowling A, Bond J (2005) The prevalence of, and risk factors for, loneliness in later life: a survey of older people in Great Britain. Ageing Soc 25:357–375. https://doi.org/10.1017/S0144686X04003332

Victor CR et al (2018) An overview of reviews: the effectiveness of interventions to address loneliness at all stages of the life-course. What Works Centre for Wellbeing, London

Weiss RS (1973) Loneliness: the experience of emotional and social isolation. MIT Press, Cambridge

Zhong B-L, Chen S-L, Conwell Y (2016) Effects of transient versus chronic loneliness on cognitive function in older adults: findings from the Chinese Longitudinal Healthy Longevity Survey. Am J Geriatr Psychiatry 24:389–398. https://doi.org/10.1016/j.jagp.2015.12.009