Problem-focused and emotion-focused coping options and loneliness: how are they related?

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Abstract We examine the extent to which coping options endorsed by older adults help alleviate loneliness, and experiences with loneliness influence the coping options. Two ways of coping are distinguished: problem-focused, i.e., improving one's relationships, and emotion-focused, i.e., lowering one's expectations about relationships. Loneliness is assessed using three observations over 6 years among 1,033 61- to 99-year-old respondents in the Longitudinal Aging Study Amsterdam. Combining the first two observations yielded four loneliness types: not lonely at T0 and T1, recently lonely, persistently lonely, and recovered from loneliness. Between the second and third observations, respondents were asked to evaluate which coping options lonely peers described in various vignettes had. From this, individual coping scores were calculated. The option to improve relationships did not affect the likelihood of one's own loneliness, and the option to lower expectations even increased it. Compared to non-lonely respondents, recently lonely ones endorsed both ways of coping equally frequently, persistently lonely ones endorsed improving relationships less frequently and

lowering expectations more frequently and recovered respondents endorsed improving relationships equally frequently and lowering expectations more frequently. We conclude that considering various ways of coping does not help alleviate loneliness and that persistently lonely and recovered respondents are at risk of a circular process with loneliness experiences resulting in considering lowering expectations more frequently, which results in a greater likelihood of loneliness, thus contributing to sustaining or re-establishing loneliness.

Keywords Loneliness · Coping · Older adults · Structural equation modeling

Introduction

Loneliness is a negative experience (Dahlberg 2007; De Jong Gierveld 1998; Peplau and Perlman 1982) observed to be related to negative effects on well-being (De Jong Gierveld 1998) and physical and mental health (Hawkey and Cacioppo 2010; Heinrich and Gullone 2006; Holwerda et al. 2012; Ó Luanaigh and Lawlor 2008; Routasalo and Pitkala 2003; Shankar et al. 2013). We assume that due to its negative impact on people's lives, lonely people generally do not want to remain that way and try to overcome their loneliness. To do so, people may consider various coping efforts. Previous studies on coping with loneliness distinguished efforts ranging from seeking social interaction to seeking distraction, e.g., by reading, and varying from reflection and acceptance to improving social competencies (Pettigrew and Roberts 2008; Rokach and Brock 1998). However, not much is known about how effective the coping options are in terms of alleviating loneliness. Nor do we know much about why people consider certain

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coping options. Previous studies on coping with various stressors show that experiences with the stressor influence the selection of coping options (Aldwin and Revenson 1987; Folkman and Moskowitz 2004). The first aim of this study is to examine the extent to which endorsing coping options is associated with subsequent reductions in loneliness. The second aim is to examine the extent to which experiences with loneliness influence the consideration of two distinct coping options.

Coping is defined as individuals' constantly changing cognitive and behavioral efforts to manage specific external and internal demands appraised as taxing or exceeding their resources (Lazarus and Folkman 1984). It is essential to this definition that coping is process-oriented, i.e., coping efforts can change over time, and that coping is contextual, i.e., coping preferences differ in various contexts. Many ways of coping with various stressors have been distinguished. In an effort to categorize these ways of coping, Skinner et al. (2003) compiled a list of four hundred distinct ways of coping. A division into two higher-order ways of coping is commonly used (Baker and Berenbaum 2007; Carver et al. 1989; Dysvik et al. 2005; Lazarus and Folkman 1984; Parker and Endler 1992; Pearlin and Schooler 1978). Problem-focused coping includes all the active efforts to manage stressful situations and alter a troubled person-environment relationship to modify or eliminate the sources of stress via individual behavior. Emotion-focused coping includes all the regulative efforts to diminish the emotional consequences of stressful events. More recently, a third higher-order way of coping has been introduced, meaning-focused coping, which is appraisal-based coping whereby an individual draws on beliefs, values, and existential goals to motivate and sustain coping. It typically occurs when coping was unsuccessful and is used to restart the coping process (Folkman 2007).

As regards loneliness, there are also a problem-focused and an emotion-focused way of coping (Schoenmakers et al. 2012). According to the approach to loneliness developed by Peplau and Perlman (1982), people are lonely if there is a discrepancy between the relationships they have and the ones they want. The incongruence between desired and actual relationships can be solved by either improving one's relationships or lowering one's expectations about relationships. Their approach also suggests a third way, i.e., reducing the perceived importance of a social deficiency, for example by telling oneself most people are lonely at one time or another. Because it only delays dealing with the problem at hand, we do not consider this a separate way of coping. Improving relationships is a problem-focused way of coping and can be achieved by making new friends or re-establishing contact with old ones. Lowering expectations is an emotion-focused way of coping and can be

achieved by lowering one's expectations about how frequently others should visit or comparing oneself with someone who is worse off (Revenson 1981). Both ways of coping are problematic for lonely people: improving relationships because it requires time and effort to establish a satisfying set of relationships (Perese and Wolf 2005) and lowering expectations because it is hard to accept that they cannot achieve the set of relationships they initially wanted. We focus on the ways of coping that individuals see as an option instead of their actual coping behavior. With these options, the person evaluates in what way the problematic emotional experience can be solved or the consequences can be mitigated (Folkman et al. 1986; Smith and Kirby 2009). By measuring the various coping options, we can examine the efforts non-lonely consider for coping with loneliness and compare them with those of people who have experience with loneliness. By doing so, we hope to gain insight into whether there are differences between the coping options by people with different loneliness experiences. The coping options are a reflection of the intentions they have for coping. Intentions are the most immediate and important predictor of individuals' behavior (Sheeran 2002). Without intentions, cognitive or behavioral changes are unlikely or coincidental at best.

In Fig. 1, we present the theoretical framework to be tested. Three observations of loneliness at three moments of time (T0, T1, and T2) are at the core of the model. The first and second observations are combined to create four types of experiences with loneliness, i.e., not lonely at T0 and T1, recently lonely (lonely at T1 but not at T0), persistently lonely (lonely at both observations), and recovered (lonely at T0 but not at T1). In comparison to people who are not lonely, we expect recently lonely people, persistently lonely people and people who have recovered from loneliness to have a higher likelihood of loneliness at T2. This means that we expect the chances of recovery from loneliness to be smaller than the chances of becoming lonely, and the chances of relapsing into loneliness to be greater than the incidence of loneliness. Between the second and third observation, we measured the coping options that respondents see for other older adults who feel lonely.

The straightforward way of thinking about coping is that individuals who are confronted with a problem will consider more coping options than those who are not. Considering more coping options indicates that the lonely person sees more potential to combat loneliness, and when followed by (various forms of) coping behavior this should lead in turn to a higher likelihood of reduction of the problem. However, problem-focused and emotion-focused ways of coping with loneliness may not be equally successful in reducing the problem. In general, coping researchers find active ways of coping to be more successful at problem-solving than emotion-focused ones (Aldwin and

Fig. 1 Schematic representation of the theoretical framework. Lonely (vs. not lonely) is dichotomous and measured at T2. Recently lonely (vs. not lonely at T0 and T1), persistently lonely (vs. not lonely at T0 and T1), and recovered (vs. not lonely at T0 and T1) are dichotomous and based on measurements at T0 and T1

Revenson 1987; Thoits 1995). This is because problem-focused ways of coping are used to remove the stressor (Carstensen et al. 2003), and emotion-focused coping pertains to short-term distractions and does not help increase satisfaction with one's social life (Rook and Peplau 1982). By improving their relationships, lonely people combat the main source of their loneliness, i.e., the lack of satisfying relationships. In contrast, by lowering their expectations, people only change the emotions attached to loneliness. Lowering expectations about relationships may reduce loneliness without addressing the source or helping people make their loneliness more endurable. This is why we expect that the more coping options people consider to improve their relationships, the less likely it is that they will be lonely at T2 (Hypothesis 1, depicted in Fig. 1 as a negative effect on loneliness of options to improve relationships), but considering more options to lower expectations has no effect on loneliness at T2 (Hypothesis 2, depicted in Fig. 1 as a zero effect on loneliness of options to lower expectations).

Coping is a process, so the options to cope may change over time, depending on the situation. This means experiences with loneliness influence which ways of coping are considered. We expect people who have not recently experienced loneliness to have a general idea about how to cope with it. When individuals experience loneliness, the problem of coping with it becomes real, which may result in considering both ways of coping to different extents. In general, we expect lonely people to consider more coping options than non-lonely ones. Thus, we expect recently lonely people to consider both options more frequently than people who were not lonely at T0 and T1 (Hypotheses 3 and 4). However, if loneliness becomes persistent, the options may change. Efforts to improve relationships require time and energy, and a failure of this coping can be disappointing. This is why persistently lonely people might reject this option. If persistently lonely people want to continue their coping efforts, they may need to lower their

relationship expectations. We hypothesize that persistently lonely people see fewer options to improve their relationships and see more options to lower their expectations than people who were not lonely at T0 and T1 (Hypotheses 5 and 6). People who have recovered from loneliness are likely to view the coping option that worked for them as being right for their lonely peers as well. Because improving relationships helps lonely people combat the source of their loneliness and lowering expectations only changes the emotions attached to loneliness, we expect improving relationships to be a more effective way of coping with loneliness than lowering expectations. So we hypothesize that people who have recovered from loneliness see more options to improve their relationships (Hypothesis 7), and see options to lower their expectations as frequently as people who were not lonely at T0 and T1 (Hypothesis 8).

Methods

Sample

The Longitudinal Aging Study Amsterdam (LASA) is a continuing study of the physical, emotional, cognitive and social functioning of older adults (Huisman et al. 2011). First conducted in 1992–1993, the survey consisted of 3,107 55-to-84-year-old adults. The sample was stratified by sex and age and the respondents were selected from the registers of eleven municipalities varying in religion and urbanization. Follow-ups were conducted in 1995–1996 ($N = 2,545$), 1998–1999 ($N = 2,076$), 2001–2002 ($N = 1,691$), 2005–2006 ($N = 1,257$), 2008–2009 ($N = 985$) and 2011–2012 ($N = 764$). In 2002–2003 an additional sample of 1,002 55-to-64-year-old respondents was selected from the same municipalities. Follow-ups were conducted in 2005–2006 ($N = 908$), 2008–2009 ($N = 833$) and 2011–2012 ($N = 759$). The initial

cooperation rates for the two samples were 63 and 62 % respectively. On the average 82 % of the respondents were re-interviewed for each follow-up, 11 % had died, 2 % were too ill or cognitively impaired to be interviewed, 5 % refused to be re-interviewed, and less than 1 % could not be contacted because they had moved to another country or an unknown destination. For this study, we analyzed data from the observations in 2005–2006, 2008–2009 and 2011–2012 and a side study conducted in 2010.

A face-to-face interview including loneliness questions was held with 1,308 of the 1,523 respondents in the 2011–2012 observation. Loneliness data from this observation was not available for five respondents because the interview was not completed. Another 199 respondents were excluded because they had not participated in the 2010 side study (non-response). Further exclusion was due to a lack of data on the coping scales from the 2010 side study ($N = 19$) and non-completion of the 2008–2009 observation ($N = 35$) or the 2005–2006 observation ($N = 17$). After this selection, the data pertained to 559 women (54 %) and 474 men (46 %) with an average age in 2011–2012 of 75 ($SD = 7.9$ in a range of 64–102). Logistic analysis of the non-response showed that compared to the 490 older adults not included in the analyses, the 1,033 older adults in the analyses were younger ($B = -0.04$, $SE = 0.01$, $p < 0.001$) and less frequently female ($B = 0.37$, $SE = 0.11$, $p < 0.01$).

Measurements

Coping

In the 2010 side study, the respondents were introduced to four fictional individuals with a different age, health status and marital status in written vignettes. One vignette individual had the same gender and age as the respondent, about the same health status (simplified to good or poor) and the same marital status (simplified to married if one had a partner or widowed if one had not a partner). The second vignette individual was 15 years older if the respondent was under the age of 75 and 15 years younger if the respondent was aged over 75, and had the same health and marital status. The third and fourth were in the other health status and in the other marital status, respectively, keeping the other characteristics equal to the first vignette individual. Respondents were not informed that one of the vignette individuals had about the same characteristic as they had at the time of the previous face-to-face interview. The sequence of the four vignettes was randomly chosen and varied from respondent to respondent. Vignettes are short hypothetical scenarios designed to elicit people's perceptions, beliefs and attitudes (Torres 2009). By using vignettes, we were able to reveal the options lonely and

non-lonely older adults consider for coping with loneliness. Here is an example of a vignette. 'Ms Berg is 69 years old and married. Ms Berg is in good health.' After the introductory question, 'Assuming this person is lonely, how can this loneliness be alleviated?' we suggested six coping efforts. The respondents were asked whether each effort should be made, yes or no. Confirmatory factor analysis as in the LISREL 8 program (Jöreskog and Sörbom 1993) was used to compose the scales representing the two ways of coping. Because the item scores were dichotomous, tetrachoric correlations were computed and Weighted Least Squares estimation was applied. We adopted the evaluation criteria for a model fit recommended by Schermelleh-Engel et al. (2003). The analysis of responses ($N = 3,962$) showed an acceptable or good fit of the two-factor model ($RMSEA = 0.057$; p for test of close fit $RMSEA = 0.11$; 90 % confidence interval for $RMSEA = 0.048$ – 0.066 ; $SRMR = 0.063$; $NNFI = 0.98$; $CFI = 0.99$; $GFI = 0.95$; $AGFI = 0.85$) with an exception of the χ^2 based fit statistics ($\chi^2_{(15)} = 11265.4$; $p = 0.00$; $\chi^2/df = 751.0$) due to the large sample size. The scale for improving relationships consisted of three items, 'Attend a course to learn to make and keep friends,' 'Go to places or club meetings to meet people,' and 'Become a volunteer' (reliability as computed from the LISREL model = 0.84). The other three items were on the scale for lowering expectations, 'Keep in mind that other people are lonely as well, or even more lonely,' 'Appreciate the existing contacts with relatives and friends more,' and 'Family and friends should say don't complain and be realistic' (reliability = 0.77).

Loneliness

Loneliness was measured via the question, 'If we divide people into not lonely, moderately lonely, severely lonely and extremely lonely, how would you categorize yourself?' A single item was used because the direct approach to loneliness corresponded with how loneliness was introduced in the vignettes on coping. Direct and indirect measures of loneliness present a somewhat different picture of loneliness and the characteristics of lonely people (Shiovitz-Ezra and Ayalon 2012). Single-item measurements referring explicitly to loneliness are commonly used, especially in epidemiological studies, and have been found to be a valid way to measure loneliness (Victor et al. 2005).

Procedure

We observed an unequal distribution of the loneliness scores. Only few respondents labeled themselves as severely or very severely lonely. For instance at T0 only 11 respondents indicated being more than moderately lonely.

At T1 this number was 15. We therefore distinguished between the non-lonely (0) and the moderately, severely or extremely lonely (1) respondents. As to the coping scales, scores on the two coping scales were available for each respondent from one (in case of missing values) to four vignettes. To calculate the scale scores of each respondent, we applied a two-step procedure. There were differences in the characteristics of the vignette persons presented to the respondents, so we conducted multilevel regression analyses of improving relationships and lowering expectations on the other way of coping and the vignette person's age, marital status, health status and individual characteristics such as gender (for details, see Schoenmakers et al. 2012). To arrive at a respondent score, the regression residuals were averaged for each respondent. The two ways of coping were positively interrelated ($r = 0.39$; $p < 0.001$). To create two independent scales, the computed scale for improving relationships was regressed on the scale for lowering expectations and the regression residuals indicated that the expectations had indeed been lowered. For an easy interpretation, the two scales were rescaled to a range from 0 to 3 reflecting the original scale scores.

We tested our hypotheses by conducting Structural Equation Modeling, as in the Mplus version 5 program. Using maximum likelihood as the method of estimation, Mplus allows for the use of linear as well as logistic regressions in the same model (Muthén and Muthén 1998–2002). Dummy variables are included for the four types of experiences with loneliness, i.e., not lonely at T0 and T1 as the category of reference, recently lonely, persistently lonely, and recovered. The analysis is repeated with changing the category of reference to determine the significance of differences between the four types.

Results

The mean scores on improving relationships ($M = 1.8$; $SD = 0.3$) and lowering expectations ($M = 1.4$; $SD = 0.3$) indicate that both options were amply considered by the respondents. Options to improve relationships were considered to the same extent by men and women ($M = 1.82$; $SD = 0.3$ vs. $M = 1.81$; $SD = 0.3$; $t_{(1031)} = 0.5$; $p > 0.05$) and by younger and older respondents ($M = 1.83$; $SD = 0.3$ vs. $M = 1.79$; $SD = 0.4$; $t_{(1031)} = 1.9$; $p > 0.05$). Options to lower expectations were considered more frequently by women than men ($M = 1.41$; $SD = 0.3$ vs. $M = 1.35$; $SD = 0.3$; $t_{(1031)} = -3.2$; $p < 0.01$) and by older than younger respondents ($M = 1.48$; $SD = 0.3$ vs. $M = 1.34$; $SD = 0.3$; $t_{(1031)} = -6.7$; $p < 0.001$).

We focused on the development of the respondents' loneliness and how it was related to the coping options they considered. At the first observation, 23 % of the

respondents classified themselves as lonely, as did 21 % at the second observation and 23 % at the third. The loneliness observations correlated over time, so being lonely once increased the likelihood of loneliness at a later observation. The unstandardized estimates from the Mplus model are presented in Fig. 2. Compared to the respondents who were not lonely at T0 or T1 ($N = 717$), those who were recently lonely ($N = 82$) were more likely to be lonely at the third observation ($B = 2.14$; $SE = 0.26$; $p < 0.001$, depicted in Fig. 2 as a positive effect of recently lonely on lonely at T2), as were those who were persistently lonely ($N = 133$; $B = 3.52$; $SE = 0.25$; $p < 0.001$) or had recovered from loneliness ($N = 101$; $B = 1.30$; $SE = 0.26$; $p < 0.001$). Changing the category of reference, the results showed that differences between the recently lonely, persistently lonely and recovered respondents were all significant (details not showed in Fig. 2). Apparently, the respondents who experienced loneliness at T0 or T1 were at a greater risk of being lonely at T2, with being lonely at T1 having the greatest risk.

Our first two hypotheses pertain to the relation between coping options and the feelings of loneliness at a later time. We expected a higher number of options to improve relationships related to a smaller chance of loneliness at T2 (Hypothesis 1). We also expected that the number of options to lower expectations has no effect on loneliness at T2 (Hypothesis 2). Neither of the hypotheses were confirmed. Considering more options to improve relationships had no effect on loneliness. Considering more options to lower expectations increased the likelihood of loneliness ($B = 0.75$; $SE = 0.29$; $p < 0.01$). Even though we rejected our second hypothesis, our results confirmed that as a way of coping, the option to lower expectations did not help alleviate loneliness.

We formulated six hypotheses on the effects of experiences with loneliness on coping options. As regards improving relationships, we expected the recently lonely respondents and the respondents who had recovered from loneliness to consider more options to improve their relationships (Hypotheses 3 and 7) and the persistently lonely respondents to consider fewer options to improve theirs (Hypothesis 5) than the respondents who were never lonely. Hypotheses 3 and 7 were refuted. The recently lonely respondents and the respondents who had recovered from loneliness considered improving their relationships to the same extent as the respondents who were not lonely at T0 and T1. Hypothesis 5 found support in the results. The persistently lonely respondents endorsed fewer options to improve their relationships than respondents who were never lonely ($B = -0.07$; Fig. 2), and also fewer than respondents who had recovered from loneliness ($B = -0.09$; $SE = 0.04$; $p < 0.05$; not shown in Fig. 2). As regards lowering expectations, we expected the recently lonely and

Fig. 2 Unstandardized parameters of the regression analysis of loneliness at T2 on coping options and loneliness at T0 and T1 ($N = 1033$). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Lonely (vs. not lonely) is dichotomous and measured at T2. Recently lonely (vs. not lonely at T0 and T1); persistently lonely (vs. not lonely at T0 and T1); and recovered (vs. not lonely at T0 and T1) are dichotomous and

based on measurements at T0 and T1. Intercept options to improve relationships: 1.82 (0.01)***; intercept options to lower expectations: 1.37 (0.01)***; threshold loneliness: 3.10 (0.67)***; threshold recently lonely: 2.45 (0.12)***; threshold persistently lonely: 1.91 (0.09); threshold recovered: 2.22 (0.11)***

persistently lonely respondents to consider more options than respondents who were never lonely (Hypotheses 4 and 6) and the recovered respondents equally frequently (Hypothesis 8). The results show that the recently lonely respondents considered an equal number of options to lower their expectations ($B = -0.01$) and the persistently lonely and recovered respondents more options than the respondents who were never lonely ($B = 0.06$ and 0.07 , respectively; there was not a mutual difference), thus confirming Hypothesis 6 and refuting Hypotheses 4 and 8. Effects for recent lonely respondents were not different from effects for the three other types. In sum, persistently lonely respondents considered the two coping options as we expected them to, but recently lonely respondents and respondents who had recovered from loneliness did not.

Discussion

How coping influences loneliness

In this study we distinguish two pathways of coping with loneliness based on the approach to loneliness focusing on the balance between the quantity and quality of existing relationships and individual's relationship standards. The problem-focused pathway suggests that older adults who were lonely at previous observations were apt to consider more options to improve their relationships than older adults who were not lonely at previous observations. Considering more options to improve their relationships should in turn alleviate loneliness. The emotion-focused pathway suggests that older adults who were lonely at previous observations were apt to consider coping options

to lower their expectations about relationships in order to reduce their loneliness. In previous studies, it has been suggested both ways of coping can help alleviate loneliness (Heylen 2010; Rook and Peplau 1982). However, the results of this study show that neither pathway results in a lower likelihood of loneliness.

Moreover, the emotion-focused way of coping is even counter-productive, as considering more options to lower expectations increases the likelihood of loneliness. A possible explanation might be that even though the older adults amply considered the two coping options, many lonely people may not have believed their loneliness could actually be alleviated. In Western society, the stereotypical view of older adults is that they are a predominantly lonely group (Abramson and Silverstein 2006; Tornstam 2007; Walker 1993). The idea that loneliness is part of old age might reinforce the older adults' own belief that it is inevitable, and thus obstruct effective coping, in contrast to middle-aged or younger adults who may see more coping options. Considering coping options may keep older people from getting lonelier rather than help them recover from loneliness or regulate the negative emotions accompanying loneliness. In the current study we followed our respondents for 6 years, but for many of the lonely ones, loneliness had been a problem for much longer. If lonely older adults did not succeed in overcoming their loneliness in the past, it is unlikely they will be able to do so later.

Starting from other theoretical approaches to loneliness a different set of ways of coping might have been distinguished. For example, Russell et al. (2011) assume that there is an inherent human need for intimacy to realize in social relationships, and consequently the emotion-focused pathway is not passable. Others emphasize social

competences as a prerequisite for developing satisfying relationships. For example, people lacking social competency may prefer texting to voice communication in using their mobile phone because it requires less emotional and cognitive commitment (Jin and Park 2013). To prevent or overcome loneliness social and emotional skills are required such as the ability to chat with people, to talk about sensitive matters, to listen to others, and to interpret signals (e.g., body language) that people transmit in conversations (DiTommaso et al. 2003). One of our three items on problem-focused coping fits with this emphasis on competencies, but based on the approach suggested by Peplau and Perlman (1982) we categorized this under a more general focus on improving relationships.

How loneliness influences coping

Experiences with loneliness influence the coping options under consideration. As expected, the persistently lonely older adults less frequently considered improving relationships and more frequently considered lowering expectations than their peers who had not experienced loneliness previously. This is in line with the findings of previous studies on coping with different stressors that problem-focused coping efforts are more frequently observed in situations perceived as more changeable and regulating coping efforts are more frequently observed in situations perceived as less changeable (Cacioppo et al. 2000; Cecen 2008; Folkman et al. 1987; Hansson et al. 1986; Thoits 1995). We suggest that ongoing loneliness makes people abandon to look at options to improve relationships that are costly in time and energy. But because they still want to do something to alleviate their loneliness, they endorse lowering expectations.

Older respondents who had recovered from loneliness considered lowering their expectations more frequently than those who had never been lonely. This finding is striking. How can these older adults have successfully combated loneliness while considering a counter-productive way of coping with loneliness? One possible explanation is that their loneliness empowered them on the hard path toward improving their relationships. Experiencing how hard this task was may have led them to focus on lowering their expectations, something the never lonely have not experienced and the recently lonely are still learning. The recently lonely older adults considered the two coping options to the same extent as those who were not lonely at T0 and T1. The recently lonely older adults might not have realized their loneliness was a problem they would have to cope with, or may not have been willing to do so.

Our results indicate that considering more options to lower expectations can lead to a circular process with loneliness resulting in lowering expectations, then resulting

in loneliness, and so on and so forth. Persistently lonely older adults and older adults who have recovered from loneliness are at risk of falling into this circular process. Our results show that the respondents who had recovered from loneliness were at risk of recurrence. One might expect recovered and other non-lonely older adults to be equally at risk, having all been not lonely at T1. One might also expect recovered older adults to be less at risk than other non-lonely older adults, because they did manage to overcome loneliness once and might be more aware of the risk factors. The risks of older adults who have recovered from loneliness might be overlooked by researchers, health practitioners and policy-makers.

Limitations

There are limitations to this study. First, we measured the coping options respondents see for others, rather than asking the respondents to reflect on their own efforts to cope with loneliness, as was typically done in previous studies (De Ridder 1997; Folkman and Moskowitz 2004; Rokach and Brock 1998). Each approach has its strengths and weaknesses. One advantage of the retrospective approach is that it reflects a real situation. However, people might not accurately recall their own behavior (Folkman and Moskowitz 2004). Measuring the coping options via vignettes enabled us to examine how non-lonely older adults considered coping with loneliness and compare their strategy with those of different types of lonely older adults. We acknowledge, however, that coping options may be perceived as an intention to act, but intentions only partly predict actual coping behavior (De Ridder 1997; Sheeran 2002). Further, we also assessed coping options as seen by non-lonely people. We assume that compared to lonely people, non-lonely people consider less options because they are not exposed to the problem. However, in our study, we exposed them the loneliness of others and asked for their advice. It might be that by doing so, the number of coping options non-lonely people consider may increase. While this may be true to a certain extent, we argue that own experiences with loneliness are more intense than experiences of others and that non-lonely people will thus consider less coping options.

Second, coping is generally regarded as a dynamic process that changes over time in response to situational demands and subjective appraisals of the situation. However, we only conducted one observation of coping options in the 6 years we followed the respondents. This only provides a partial view of the continuous process of coping. We also did not control for the occurrence of life events such as geographic relocation and bereavement that might have affected people's loneliness and their coping efforts.

Third, most of the lonely respondents in this study were not severely but only mildly lonely. There are two reasons why this might explain their lack of success in alleviating their loneliness using the coping options. One is that the discomfort of feeling mildly lonely might not warrant the hardship and sacrifices required for the coping efforts under consideration. The other is that depending on the cause and duration of their loneliness, mildly lonely older adults may not feel it is necessary to consider coping because they hope their loneliness will be alleviated without them. The process of coping with loneliness outlined in the introduction might be more applicable to more severely lonely people. As they face a greater problem, they might be in need of more coping efforts and be more inclined to actually make the effort to successfully cope with loneliness. So we suggest that future studies on coping with loneliness include respondents with more variety in their levels of loneliness.

Conclusion

We conclude that in itself, considering coping options does not help alleviate loneliness. On the contrary, we observed a pattern of persistently lonely and recovered respondents being at risk of a circular process with loneliness experiences more frequently resulting in lowering their relationship expectations. In this process, the focus is not on improving relationships and abandoning this ambition contributes to sustaining or re-establishing loneliness. It seems that individuals are unable to break this cycle and might need individuals or organizations in the vicinity to step in and provide guidance and assistance in coping with loneliness.

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