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Strategies to Prevent Loneliness

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Abstract

‘Prevention is better than cure’. This also applies to loneliness experiences: preventing people from loneliness is better than helping them to reduce their feelings of loneliness through interventions. In this chapter, we argue the necessity of loneliness prevention strategies for handling future life events that might trigger the onset of loneliness. More particularly we opt for the coping strategy characterized as ‘improving one’s social convoy’ by investing time and energy in the quantity and quality of relationships, in order to increase social embeddedness of younger and older adults. We use a process model of coping with loneliness that we tailor to the requirements of adults who are currently not or only mildly lonely. In using the model, we address three phases of the prevention process: (1) awareness: being aware of the risk factors of loneliness and the importance of a social convoy; (2) meeting the preconditions for setting the social embeddedness objectives: to be willing, knowing how, and able to maintain or improve one’s social convoy; and (3) defining the route to build and maintain an optimal social convoy and keep the paths to reach the social embeddedness objectives.

Introduction

On the basis of surveys in the Netherlands and the UK, it is estimated that about 20 percent of all adult men and women are mildly lonely. Another 8 to 10 percent is intensely lonely (Van Tilburg, & De Jong Gierveld, 2007; Victor et al., 2005). In this context, it is important to take into account the different types of loneliness that people might experience. Weiss (1973) differentiated emotional loneliness related to the absence of an intimate figure, and social loneliness related to the absence of a broader, engaging social network. In general intense loneliness is related more to emotional than to social loneliness, while the combination of both places people at risk of the most intense, despairing loneliness (Van Tilburg, & De Jong Gierveld, 2007). Intensely lonely people frequently specify their loneliness situation as one of emptiness and feeling rejected, a disconnection from important people and from today's society:

“I experience loneliness.....loneliness is when I am all alone, when there is nobody asking for me and nobody to ask [for]. Sometimes..... in some situations you feel.....like [you are in] a vacuum – all alone”. (70 year old man) (Hauge, & Kirkevold, 2010, p. 3).

“It's nice to be needed or wanted to be asked advice ... but a lot of the old folks are just so reluctant to offer other things and they feel we're no longer needed. That's a terribly depressing thought – I am just no longer needed. They say if I am no longer here, nobody would miss me”. (83 year old woman) (Stanley et al., 2010, p. 411).

Many of them, not surprisingly, express their longing for escaping loneliness.

Fortunately, as shown by recent longitudinal studies (Dykstra, Van Tilburg, & De Jong Gierveld, 2005; Jylhä, 2004; Newall, Chipperfield, & Ballis, 2013; Wenger, & Burholt, 2004), for many people feelings of loneliness are temporary. It is not very clear yet, however, how people manage to alleviate their loneliness. From the many studies on the causes of loneliness, we have a good picture of the main risk factors that can trigger

the onset of loneliness, but the opposites of these factors seem to be less definitely conclusive in explaining how feelings of loneliness might end (Newall et al., 2013).

The main group of concern is those dealing with prolonged loneliness, who apparently are not able to escape from loneliness feelings, neither by themselves nor with the help of family and friends. Long-lasting loneliness has serious consequences for those involved. Via both retrospective and prospective surveys it is shown that loneliness predicts, among others, poorer physical health, less wellbeing, depressive symptoms (Aanes, Mittelmark, & Hetland, 2010; Cacioppo, Hawkley, & Thisted, 2010), alcoholism (Åkerlind, & Hörnquist, 1992) and suicidal thinking (Fässberg et al., 2014). A meta-analysis by Holt-Lunstad, Smith and Layton (2010) showed that a small social network, a shortage of support received from network members, and especially experiencing intense feelings of loneliness are decisive for early mortality. Moreover, loneliness has consequences for society at large. Lonely adults more frequently than non-lonely peers rely on General Practitioners and other health care workers in the community, and have higher risks of nursing home admission (Russell et al., 1997).

Numerous health and welfare organizations offer a wide variety of services and activities targeting loneliness, but review and case studies find limited support for effectiveness of these loneliness interventions (Andersson, 1998; Bartlett et al., 2013; Cattan et al., 2005; Dickens et al., 2011; Findlay, 2003; Masi et al., 2011; Schoenmakers, 2013). Meaningful reduction in feelings of loneliness is hard, often requires a series of appropriate interventions and takes time. For that reason, in this chapter we make a plea to move from loneliness reduction to loneliness prevention strategies (see also Newall, & Menec, 2013). At this moment, ideas about prevention of loneliness are based on a fair allotment of common sense, but also elicited out of past

and ongoing loneliness studies and our work in numerous advisory boards of local and country wide initiatives to combat loneliness.

Loneliness: definition, related concepts, causes and cures

The concept of loneliness

In this chapter loneliness is defined as “a situation experienced by the individual as one where there is an unpleasant or inadmissible lack of (quality of) certain relationships. This includes situations in which the number of existing relationships is smaller than is considered desirable, as well as situations where the intimacy one wishes for has not been realized” (De Jong Gierveld, 1987, p. 120). The opposite of loneliness is *socially embeddedness*. Most people wish to have at least one relationship in whom they can regularly confide their personal worries and feelings. A romantic partner, an adult child or a best friend are frequently identified as intimate figures. If such a confidant is missing, the risk of emotional loneliness increases. Most people also wish to have several relationships with whom they can share the daily hassles and pleasures. Casual friends, colleagues and neighbors are among the ones who take up these roles. If these relationships are missed, the risk of social loneliness increases.

In talking about the individual’s personal relationships we opt for using the concept ‘*social convoy*’ (Antonucci, 2001; Guiaux, Van Tilburg, & Broese van Groenou, 2007) in order to make profit of the symbolic and well-known interpretations of a convoy, such as ‘sailing under convoy’. Kernel characteristics of ‘sailing under convoy’ encompass reciprocal social exchanges and support and being prepared to care and protect the lives and wellbeing of the co-members of your social convoy. Engaging social exchanges with kin and non-kin members of the social convoy are likely to be

considered voluntary and not legally binding (Ajrouch, Akiyama, & Antonucci, 2007). People report that they receive several types of support from the social convoy, such as confiding, reassuring, respect and sick care (Antonucci, 1994, 2001). Quality of interrelationships and reciprocal exchange of support are crucial in the functioning of the social convoy, both in periods of stability and in times of changes (Antonucci et al., 2011). The social convoy encompasses many types of bonds such as long-term family relationships as well as friends, colleagues and other contacts such as functioning in everyday contacts in pubs or in church activities (Buz et al., 2014). Research has shown that the size and composition of the social convoy might differ according to life course periods; e.g., given reduced opportunities to counteract social losses at later life, the social convoys of very old people are nearly half as large as those of old people, but the reductions in social relationships are limited to social partners who are less close (Lang, & Carstensen, 1994).

The above-mentioned definition of loneliness stems from the cognitive discrepancy model, as proposed by Perlman and Peplau (1981). Many researchers use this model to investigate the onset and continuation of loneliness. Crucial elements in the cognitive discrepancy model of loneliness are (1) the number and types of personal relationships *realized*, (2) the individuals' *wishes* regarding number and types of personal relationships, and (3) the outcomes of the *subjective comparison* between realized and wished for relationships. For many people the outcomes of the comparison are neutral, indicating correspondence between wished for and realized relationships, for others the comparison indicates a surplus of realized relationships (sometimes related to a longing for privacy), and a third group experiences a shortage in the personal relationships realized. The third group is the one experiencing loneliness.

Given the individual variety in levels of wished for relationships, it is obvious that the number of realized relationships as such is not decisive for the intensity of loneliness, as is illustrated in figure 1. Note that in this study we use the De Jong Gierveld loneliness scale (De Jong Gierveld, & Kamphuis, 1985; De Jong Gierveld, & Van Tilburg, 1999), encompassing 6 items informing us about the intensity of emotional loneliness and 5 items informing us about social loneliness, all together resulting in a reliable and valid picture of the loneliness experiences of adults; the score of '0' indicates the absence of loneliness and the score '11' indicates extremely loneliness.

Figure 1 about here

Adults with a low number of personal relationships, e.g., between 0 and 3, are characterized by higher mean levels of loneliness than adults with 4-8 relationships, or with more than 9 relationships; this is illustrated by the mean values of the intensity of loneliness that vary from 4.92 for those with the lowest numbers of relationships, to 1.08 for those with 29 or more personal relationships. But figure 1 also indicates large variations in intensity of loneliness among those with the same numbers of relationships. Given 0-3 relationships realized, one quarter of them experiences 2.25 loneliness intensity, and the quarter of the most lonely individuals experiences 7.75 as loneliness intensity. Varieties in perceived intensity of loneliness might be related to differences in the size of the social convoy as wished for, but might also be caused by between-individual differences in the composition and quality of existing relationships (Aartsen, & Jylhä, 2011; Dykstra, & Fokkema, 2007). Prior research has shown that relationship quality is most decisive and predictive of loneliness (Van Tilburg, & De Jong Gierveld, 2007). However, it is necessary to have some quantity of relationships in order to have high quality relationships (Antonucci, Ajrouch, & Birditt, 2014), as supported by figure 1. Although there is quite a bit of variation in intensity of

loneliness, there is certainly a relationship between numbers of realized relationships and the intensity of loneliness: those with 29 or more personal relationships have much lower intensities of loneliness as compared to individuals with less than four relationships, even when we take the variations in that group into account.

Loneliness determinants and the life course

Loneliness at a certain point in time is to be considered as an outcome of both early- and later life circumstances and experiences. Personality characteristics, the socioeconomic position of the parental home, gender, educational level, work and income, the partner and parent history and position (with partner or without partner; with children or without children), physical and mental health, as well as relationships with kin and non-kin, are among the main determinants of the size and composition of the social convoy, and of loneliness in adulthood (Dahlberg, & McKee, 2013; Fokkema, De Jong Gierveld, & Dykstra, 2012; Hawkley et al., 2008; Heylen, 2010).

Moreover, empirical research has shown that country level differences in welfare and health care regimes affect social wellbeing and loneliness of mid-life and older adults (De Jong Gierveld, & Tesch-Römer, 2012). In this context, special attention is needed for older adults in a situation of long term socioeconomic deprivation. A lower educational level, economic hardship and poverty increase loneliness (Fokkema, De Jong Gierveld & Dykstra, 2012); this is especially so if economic hardship started in the parental home and continues until later age. Older adults in deprived urban areas or in remote rural living conditions are the first ones to become lonely (Burholt, & Scharf, 2013; Ferraro, & Shippee, 2009; O'Rand, 2001; Routasalo et al., 2006; Scharf, Phillipson, & Smith, 2005).

The need to tackle loneliness

The need to address loneliness, e.g., via creating connections between lonely and not lonely adults is broadly understood in several European countries, such as the Netherlands and the UK. Organizations who used to work in the field of care for older adults or for adults in poor health, are nowadays cooperating in ‘Campaigns to end loneliness’. Objectives are formulated, encompassing: (1) to raise awareness of the problems caused by loneliness and (2) to identify and raise awareness of what works in reducing loneliness. A long series of actions and interventions have been started or ongoing activities have been broadened, all together involving many community organizations with thousands of volunteers and professionals.

It goes without saying that offering companionship and personal attention by arranging regular home visits or coffee hours for older persons, support with shopping and meals, telephone circles and so on, is essential for guaranteeing a minimum level of comfort for lonely adults. However, a substantial reduction of loneliness feelings among the participants is often not achieved (Andersson, 1998; Bartlett et al., 2013; Cattan et al., 2005; Dickens et al., 2011; Findlay, 2003; Masi et al., 2011). Evaluation studies indicated that interventions are effective sometimes and only under particular circumstances (Cattan et al., 2005; Findlay, 2003; Fokkema, & Knipscheer, 2007; Hagan et al., 2014; Masi et al., 2011; Schoenmakers, 2013; Van Haastregt et al., 2000; Windle, Francis, & Coomber, 2011). The very modest success of loneliness interventions is partly related to the fact that researchers have identified many unchangeable and uncontrollable factors that trigger or increase the risk of loneliness (e.g., moving to another region or country, death of an intimate person, deteriorating

health; Hawkey et al., 2008), while changeable and controllable factors that might alleviate people from (severe) loneliness are not yet identified or not fully understood. Moreover, loneliness interventions are predominantly curative in focus – volunteers and professionals step in when someone is lonely for some time – while more effects can be expected of activities that aim to avoid loneliness; the saying ‘prevention is better than cure’ applies here too.

Loneliness prevention

Loneliness prevention is anticipating a situation of (severe) loneliness and taking actions to avoid these experiences; appropriate before people are confronted with loneliness. Talking about loneliness prevention is treating one’s social context as one that is in principle responsive for actions in the direction of (more) embeddedness. To our best knowledge, there is no specific framework guiding individuals in the process of preventing loneliness. Hence, we build on and adapt the model of Schoenmakers (2013, p. 25), a model based on ideas developed by Linnemann (1996) and Van Tilburg (1982) and designed to guide organizations in which way they could arrange their interventions in order to help lonely people get through all the necessary stages to cope with loneliness. This adapted model is presented in Figure 2 and encompasses six interrelated stages which in turn can be grouped into three phases: (1) being aware of the risk factors of loneliness and the importance of a social convoy, (2) meeting the preconditions for social embeddedness objectives, and (3) defining the route and keep the paths to reach the objectives.

Figure 2 about here

(1) *Awareness*. The first stage of preventing loneliness is awareness of the risk factors of loneliness and of the importance of a social convoy to alleviate loneliness (Weinstein, Sandman, & Blalock, 2002). During one's life, people are confronted with on- and off-time events, expected and unexpected transitions, gains and losses. People usually need to have several others to cope with these experiences and stressors. Hence, ongoing investment in the quantity and quality of one's social network is of utmost importance to maintain sufficient social interaction and support, and accordingly, to prevent them from loneliness; if one member of the social network is lost, others can fill at least part of the gap.

In this first stage, organizations can intervene in different ways. At the societal level, for instance, one can make people aware of the main loneliness-provoking factors and the protective role of a diverse social network by a national campaign. A recent study shows that non-lonely older adults seem to be open to such a campaign: mid-life and young-old adults, in particular those in good health and married, expect that old-old adults confronted with widowhood and poor health are more often lonely than peers not exposed to these risk factors (Schoenmakers, Van Tilburg, & Fokkema, 2012). An example of an intervention at the individual level is to offer a course in which people get better insight into the strengths and weaknesses of one's current social network and how an optimal social embeddedness might look like. The new anticipated social convoy has to fit the very personal wishes of the individual involved, but has to be realistic too. Research among divorced women and men has shown that "people without a partner who have a strong desire to have a [new, JG] partner, that is to say, among whom there is a strong discrepancy between desire and reality, are more likely to suffer from emotional loneliness. Conversely, emotional loneliness was far less prevalent among people ... who had no more than a slight preference to have a [new,

JG] partner” (Dykstra, & Fokkema, 2007, p. 7). Parallel outcomes have been shown for older widowed persons: “The widowed who attached relatively little importance to a partner relationship were, on average, less lonely than those who attached relatively much importance to that relationship” (Dykstra, & De Jong Gierveld, 1994, p. 252/3).

(2) *Meeting the preconditions for social embeddedness objectives.* While loneliness refers to the subjective experiences of missing a certain number and/or quality of relationships with others, the embeddedness objectives are to be seen as connected to the aim to be part of a social convoy that consists of a certain number of confidants and a certain number of other good relationships such as (close) friends and other companions. In setting these objectives, three preconditions are crucial: to be willing, knowing how, and able to maintain or improve one’s social convoy.

Regarding *willingness*, establishing a satisfying set of relationships is not that simple to achieve and to maintain. It is an ongoing investment which requires time and energy; close friendships are not build up in a fortnight (Perese, & Wolf, 2005). In contrast, building new friendships frequently starts with making acquaintances among one’s colleagues, co-volunteers, and club mates. Moreover, it is necessary to start on time; after the onset of dementia it is too late. In addition, one should be interested in one’s conversation partner, willing to be open for reciprocal support, and to a certain extent refrain from too much solitary activities, such as gaming. To motivate people to continuously invest in the quantity and quality of one’s social relationships, governments and welfare organizations could periodically address the negative implications of loneliness by public media (commercials, newspapers). Furthermore, measures and actions can be taken that are helpful to people in finding the time to participate in social encounters. In this respect one can think of policies that are aimed to facilitate work and family life or to relieve informal carers.

Knowledge about the ways how to improve or maintain one's social convoy is a second prerequisite for preventing (severe) loneliness. Active membership of sport clubs, involvement in church activities and other organizations (Brown, 2011; Kahlbaugh et al., 2011; Pettigrew, & Roberts, 2008), daily meeting old friends in local pubs (Rokach, 2008; Sánchez, De Jong Gierveld, & Buz, 2014), and volunteer work are known to raise opportunities for meeting new acquaintances and friends, and to integrate into the community by meeting new people and developing the social convoy (Rožanova, Dosman, & De Jong Gierveld, 2008). Social media can be helpful in contacting new members of the convoy and in maintaining existing relationships, too (Fokkema, & Knipscheer, 2007). Intervention organizers can help people in this stage by showing them various strategic options for social interaction.

With regard to *ability*, not all individuals are equally equipped to start and pursue activities in the direction of a broad and high quality social convoy. Loneliness prevention requires a certain level of self-esteem, social skills and self-management abilities; possibilities to control the size, composition and quality of one's social convoy might be crucial in loneliness prevention strategies, as was also shown by Newall and Menec (2013). Genes, specific personal and personality characteristics, such as bashfulness, timidity, self-pity, suffering from delusions, and antisocial behavior are other factors that influence the quantity and quality of relationships realized and the risks for loneliness (Antonucci et al., 2014). Meesters et al. (2010) showed that the social convoy of groups of psychiatric patients is smaller than those of their peers, as is the level of emotional support exchanged. Besides individual constraints, societal induced constraints can hinder people to start and pursue activities to prevent loneliness. For example, Van Tilburg and Thomése (2010) postulate that current societal trends are characterized by de-traditionalization, this encompasses that

the protective surrounding of e.g., family, the church, and the local community is no longer given. The resulting "... fluidity of the social context leaves individuals with a fundamental incapability to realize their own autonomy. (...). People, who have material, personal and social resources are well equipped to cope with this uncertainty" (Van Tilburg, & Thomése, 2010, p 220/1). However, people who are economically or socially vulnerable might fall victim and nowadays have serious problems in realizing a social convoy as wished for. Intervention organizers can be helpful in overcoming above-mentioned constraints by, for instance, teaching people social skills and self-management abilities and assisting (financially) vulnerable people.

(3) Defining the route and keep the paths to reach the objectives

The final phase includes all actions that one actually performs to handle or anticipate negative life events, transitions, etc. that might trigger the onset of loneliness, followed by an evaluation of how successful and effective these actions have been. If not, the process of preventing loneliness needs to be restarted. In this phase it is the individual who has to take the lead and has to select and start the actions that optimally fit into the route defined. Furthermore, intervention organizers can help people by offering additional actions that might support the individual in keeping the route and reach the objectives.

To conclude

In this chapter, we made a plea to move from loneliness reduction to loneliness prevention strategies. Based on the cognitive approach to loneliness, we proposed a model specifying the stages individuals have to go through in order to have a social

convoy that buffers them from social losses throughout their life. This model is also useful for health and welfare organizations, identifying a range of interventions that can help individuals in each stage in their efforts to prevent loneliness. These interventions go beyond their current spectrum of activities. Moreover, it requires a culture change amongst organizations from 'cure' to 'prevention'. Future effect studies are needed to evaluate which interventions are the most successful in preventing loneliness.

References:

- Aanes, M. M., Mittelmark, M. B., & Hetland, J. (2010). Interpersonal stress and poor health: The mediating role of loneliness. *European Psychologist, 15*(1), 3-11.
- Aartsen, M., & Jylhä, M. (2011). Onset of loneliness in older adults: Results of a 28 year prospective study. *European Journal of Ageing, 8*(1), 31-38.
- Ajrouch, K., Akiyama, H., & Antonucci, T. C. (2007). Cohort differences in social relations among the elderly. In H.-W. Wahl, C. Tesch-Römer & A. Hoff (Eds.), *New Dynamics in Old Age: Individual, Environmental and Societal Perspectives* (pp. 43-63). New York: Baywood, Amityville.
- Åkerlind, I., & Hörnquist, J. O. (1992). Loneliness and alcohol abuse: A review of evidences of an interplay. *Social Science & Medicine, 34*(4), 405-414.
- Andersson, L. (1998). Loneliness research and interventions: A review of the literature. *Aging & Mental Health, 2*(4), 264-274.
- Antonucci, T. C. (1994). A life-span view of women's social relationships. In B. F. Turner & L. Troll (Eds.), *Women Growing Older. Psychological Perspectives* (pp. 239-269). London: Sage.
- Antonucci, T. C. (2001). Social relations: An examination of social networks, social support, and sense of control. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the Psychology of Aging; Fifth Edition* (pp. 427-453). New York: Academic Press.
- Antonucci, T. C., Ajrouch, K. J., & Birditt, K. S. (2014). The Convoy Model: Explaining social relations from a multidisciplinary perspective. *The Gerontologist, 54*(1), 82-92. doi: 10.1093/geront/gnt118
- Antonucci, T. C., Birditt, K. S., Sherman, C. W., & Trinh, S. (2011). Stability and change in the intergenerational family: A convoy approach. *Ageing & Society, 31*(7), 1084-1106.
- Bartlett, H., Warburton, J., Lui, C. W., Peach, L., & Carroll, M. (2013). Preventing social isolation in later life: Findings and insights from a pilot Queensland intervention study. *Ageing and Society, 33*(7), 1167-1189.
- Brown, E. J. (2011). *Social support facilitated through group physical activity programs for older adults* (Thesis Master of Science), California State University, Sacramento.

- Burholt, V., & Scharf, T. (2013). Poor health and loneliness in later life: The role of depressive symptoms, social resources, and rural environments. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*.
- Buz, J. S., Sanchez, M., Levenson, M. R., & Aldwin, C. M. (2014). Aging and social networks in Spain: The importance of pubs and churches. *The International Journal of Aging and Human Development, 78*(1), 23-46.
- Cacioppo, J. T., Hawkey, L. C., & Thisted, R. A. (2010). Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago Health, Aging, and Social Relations Study. *Psychology and Aging, 25*(2), 453-463.
- 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 & Society, 25*, 41-67.
- Dahlberg, L., & McKee, K. J. (2013). Correlates of social and emotional loneliness in older people: Evidence from an English community study. *Aging & Mental Health*.
- De Jong Gierveld, J. (1987). Developing and testing a model of loneliness. *Journal of Personality and Social Psychology, 53*, 119-128.
- De Jong Gierveld, J., & Kamphuis, F. (1985). The development of a Rasch-type loneliness scale. *Applied Psychological Measurement, 9*(3), 289-299.
- De Jong Gierveld, J., & Tesch-Römer, C. (2012). Loneliness in old age in Eastern and Western European societies: Theoretical perspectives. *European Journal of Ageing, 9*(4), 285-295.
- De Jong Gierveld, J., & Van Tilburg, T. G. (1999). *Manual of the Loneliness Scale*. Amsterdam: Vrije Universiteit.
- Dickens, A., Richards, S., Greaves, C., & Campbell, J. (2011). Interventions targeting social isolation in older people: A systematic review. *BMC Public Health, 11*, 647.
- Dykstra, P. A., & De Jong Gierveld, J. (1994). The theory of mental incongruity, with a specific application to loneliness among widowed men and women. In R. Erber & R. Gilmour (Eds.), *Theoretical Frameworks for Personal Relationships* (pp. 235-259). Hillsdale N.J.: Erlbaum.
- Dykstra, P. A., & Fokkema, T. (2007). Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Basic and Applied Social Psychology, 29*(1), 1-12.

Dykstra, P. A., Van Tilburg, T., & De Jong Gierveld, J. (2005). Changes in older adult loneliness: Results from a seven-year longitudinal study. *Research on Aging, 27*(6), 725-747.

Fässberg, M. M., Östling, S., Braam, A. W., Bäckman, K., Copeland, J. R. M., Fichter, M., Kivelä, S.-L., Lawlor, B. A., Lobo, A., Magnússon, H., Prince, M. J., Reischies, F. M., Turrina, C., Wilson, K., Skoog, I., & Waern, M. (2014). Functional disability and death wishes in older Europeans: Results from the EURODEP concerted action. *Social Psychiatry and Psychiatric Epidemiology*.

Ferraro, K. F., & Shippee, T. P. (2009). Ageing and cumulative inequality: How does inequality get under the skin? *The Gerontologist, 49*(3), 333-343.

Findlay, R. A. (2003). Interventions to reduce social isolation amongst older people: Where is the evidence? *Ageing & Society, 23*(5), 647-658.

Fokkema, T., De Jong Gierveld, J., & Dykstra, P. A. (2012). Cross-national differences in older adult loneliness. *The Journal of Psychology, 146*(1-2), 201-228.

Fokkema, T., & Knipscheer, C. P. M. (2007). Escape loneliness by going digital: A quantitative and qualitative evaluation of a Dutch experiment in using ECT to overcome loneliness among older adults. *Ageing & Mental Health, 11*(5), 496-504.

Guiaux, M., Van Tilburg, T., & Broese van Groenou, M. B. (2007). Changes in contact and social support exchange in personal networks after widowhood. *Personal Relationships, 14*(3), 457-473.

Hagan, R., Manktelow, R., Taylor, B. J., & Mallett, J. (2014). Reducing loneliness amongst older people: A systematic search and narrative review. *Ageing & Mental Health*.

Hauge, S., & Kirkevold, M. (2010). Older Norwegians' understanding of loneliness. *International Journal of Qualitative Studies in Health and Well-Being, 5*(1), 1-7.

Hawkley, L. C., Hughes, M. E., Waite, L. J., Masi, C. M., Thisted, R. A., & Cacioppo, J. T. (2008). From social structural factors to perceptions of relationship quality and loneliness: The Chicago health, aging, and social relations study. *Journal of Gerontology, Social Sciences 63B*(6), S375-S384.

Heylen, L. (2010). The older, the lonelier? Risk factors for social loneliness in old age. *Ageing & Society, 30*(7), 1177-1196.

- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Med*, 7(7), 1-19.
- Jylhä, M. (2004). Old age and loneliness: Cross-sectional and longitudinal analyses in the Tampere longitudinal study on aging. *Canadian Journal on Aging*, 23(2), 157-168.
- Kahlbaugh, P. E., Sperandio, A. J., Carlson, A. L., & Hauselt, J. (2011). Effects of playing Wii on well-being in the elderly: Physical activity, loneliness, and mood. *Activities, Adaptation & Aging*, 35(4), 331-344.
- Lang, F. R., & Carstensen, L. L. (1994). Close emotional relationships in late life: Further support for proactive aging in the social domain. *Psychology and Aging*, 9(2), 315-324.
- Linnemann, M. A. (1996). Een eenzaam (s)lot? Een integratie van verklaringen van eenzaamheid onder ouderen boven de 75 jaar [Destinated for loneliness: An integral explanation of loneliness of elderly people over 75 years old]. Dissertation, Vrije Universiteit Amsterdam.
- Masi, C. M., Chen, H.-Y., Hawkey, L. C., & Cacioppo, J. T. (2011). A meta-analysis of interventions to reduce loneliness. *Personality and Social Psychology Review*, 15(3), 219-266.
- Meesters, P. D., Stek, M. L., Comijs, H. C., De Haan, L., Patterson, T. L., Eikelenboom, P., & Beekman, A. F. (2010). Social functioning among older community-dwelling patients with schizophrenia: A review. *American Journal of Geriatric Psychiatry*, 18(10), 862-878.
- Newall, N. E. G., Chipperfield, J. G., & Bailis, D. S. (2013). Predicting stability and change in loneliness in later life. *Journal of Social and Personal Relationships*.
- Newall, N. E. G., & Menec, V. H. (2013). Targeting socially isolated older adults: A process evaluation of the Senior Centre Without Walls Social and Educational Program. *Journal of Applied Gerontology*.
- O'Rand, A. M. (2001). Stratification and the life course; the forms of life-course capital and their interrelationships. In R. H. Binstock & L. K. George (Eds.), *Handbook of Aging and the Social Sciences, Fifth Edition* (pp. 197-213). New York: Academic Press.
- Perese, E. F., & Wolf, M. (2005). Combating loneliness among persons with severe mental illness: Social network interventions' characteristics, effectiveness and applicability. *Issues in Mental Health Nursing*, 26(6), 591-609.

Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In R. Gilmour & S. Duck (Eds.), *Personal Relationships 3: Personal Relationships in Disorder* (pp. 31-43). London: Academic Press.

Pettigrew, S., & Roberts, M. (2008). Addressing loneliness in later life. *Aging & Mental Health, 12*(3), 302-309.

Rokach, A. (2008). Coping with loneliness in USA and Spain. *Psychology Journal, 5*(1), 17-31.

Routasalo, P. E., Savikko, N., Tilvis, R. S., Strandberg, T. E., & Pitkala, K. H. (2006). Social contacts and their relationships to loneliness among aged people: A population-based study. *Gerontology, 52*(3), 181-187.

Rozanova, J., Dosman, D., & De Jong Gierveld, J. (2008). Participation in rural contexts: Community matters. In N. C. Keating (Ed.), *Rural Ageing: A Good Place to Grow Old?* (pp. 75-86). Bristol, UK: The Policy Press.

Russell, D. W., Cutrona, C. E., De la Mora, A., & Wallace, R. B. (1997). Loneliness and nursing home admission among rural older adults. *Psychology and Aging, 12*(4), 574-589.

Sánchez, M. M., De Jong Gierveld, J., & Buz, J. (2014). Loneliness and the exchange of social support among older adults in Spain and the Netherlands. *Ageing & Society, 34*(2), 330-354.

Scharf, T., Phillipson, C., & Smith, A. E. (2005). Social exclusion of older people in deprived urban communities of England. *European Journal of Ageing, 2*, 76-87.

Schoenmakers, E. (2013). *Coping with loneliness*. Dissertation, Vrije Universiteit Amsterdam.

Schoenmakers, E. C., Van Tilburg, T., & Fokkema, T. (2012). Awareness of risk factors for loneliness among third agers. *Ageing & Society*.

Stanley, M., Moyle, W., Ballantyne, A., Jaworski, K., Corlis, M., Oxlade, D., . . . Young, B. (2010). 'Nowadays you don't even see your neighbours': Loneliness in the everyday lives of older Australians. *Health and Social Care in the Community, 18*(4), 407-414.

Van Haastregt, J. C. M., Diederiks, J. P. M., Van Rossum, E., De Witte, L. P., & Crebolder, H. F. J. M. (2000). Effects of preventive home visits to elderly people living in the community: Systematic review. *British Medical Journal, 320*(18).

Van Tilburg, T. G. (1982). *Werken aan verwerking van eenzaamheid* [Working on coping with loneliness]. Amsterdam: Vakgroep Methoden en Technieken VU.

Van Tilburg, T., & De Jong Gierveld, J. (Eds) (2007). *Zicht op eenzaamheid: Achtergronden, oorzaken en aanpak [Loneliness: Background, Causes and Interventions]*. Assen: Van Gorcum.

Van Tilburg, T., & Thomése, F. (2010). Societal dynamics in personal networks. In D. Dannefer & C. R. Phillipson (Eds.), *The Sage Handbook of Social Gerontology* (pp. 215-225). London: Sage.

Victor, C. R., Scambler, S. J., 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 & Society*, 25(6), 357-376.

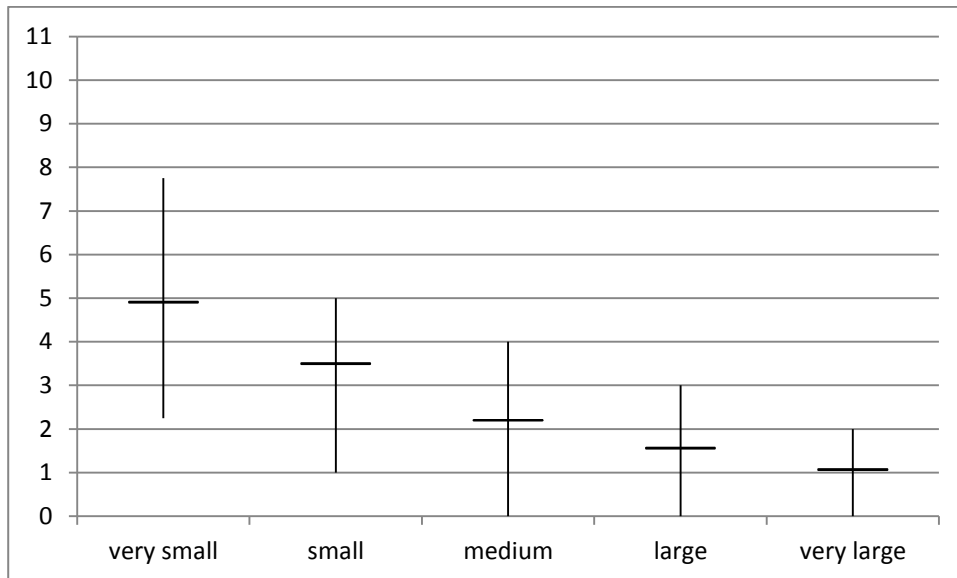
Weinstein, N. D., Sandman, P. F. D., & Blalock, S. J. (2002). The precaution adoption process model. In B. Glanz, K. Rimer & K. Viswanath (Eds.), *Health Behavior and Health Education: Theory, Research, and Practice* (pp. 121-143). San Francisco: Jossey-Bass.

Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, Mass.: The MIT Press.

Wenger, G. C., & Burholt, V. (2004). Changes in levels of social isolation and loneliness among older people in a rural area: A twenty-year longitudinal study. *Canadian Journal on Aging*, 23(2), 115-127.

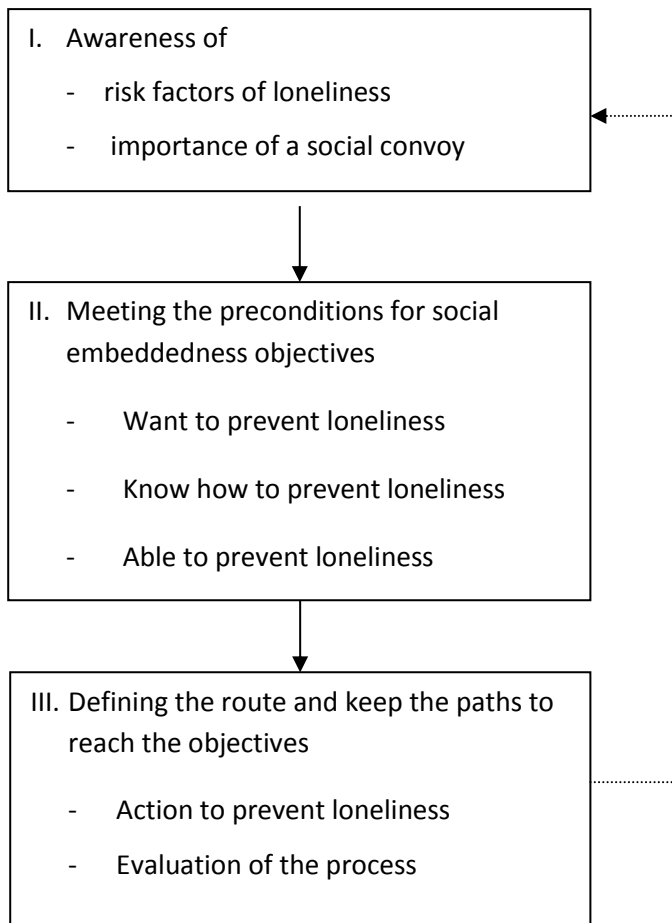
Windle, K., Francis, J., & Coomber, C. (2011). Preventing loneliness and social isolation: Interventions and outcomes. *Research Briefing* (Vol. 39, pp. 1-15): Social care institute for excellence.

Figure 1. Loneliness by size of the social convoy: mean, and 25 and 75 percentile values on the De Jong Gierveld loneliness scale ranging from 0, not lonely to 11, extremely lonely (Adults aged 60 and over, LASA 2001/2)



Legend: very small convoy: 0-3 contacts; small convoy: 4-8 contacts; medium size convoy: 9-14 contacts; large convoy: 15-28 contacts; very large: 29 and more contacts.

Figure 2. The process of preventing loneliness



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