REVIEW

Social needs of older people: a systematic literature review

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ABSTRACT
Social needs are important basic human needs. When social needs are not satisfied, this can lead to mental and physical health problems. With a growing population of older adults and the need for them to stay healthy and community-dwelling, satisfying social needs is important. The aim of this review is to give more insight into the social needs of older people and subsequently into the characteristics of effective interventions for satisfying older people's social needs. A systematic review of the existing literature on quantitative, qualitative and mixed empirical studies on the social needs of older people was conducted. The themes that emerged were diversity, proximity, meaning of the relationship and reciprocity. These themes offered several intervention implications. Participation in hobbies and in volunteer work and being connected were among the main findings. The social needs of older people are diverse. They focus on both the intimate and the peripheral members of their networks. When satisfying social needs, reciprocity is important. The feeling of connectedness to others and to a community or neighbourhood contributes to wellbeing as well as a feeling of independence. Staying active by doing volunteer work or participating in (leisure) social activities satisfies social needs. Therefore, interventions should focus especially on the connectedness, participation and independence of the older adult.

KEY WORDS – social needs, interventions, older adults, Social Production Function Theory of Successful Aging, social convoy model, socio-emotional selectivity theory.

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Introduction

The protective influence of satisfied social needs on health and wellbeing

For every individual social needs are one of the most important human needs. They come right after physical needs and the need for safety as defined in the often-applied Maslow hierarchy of human needs (Maslow *et al.* 1970). Maslow *et al.* (1970) define social needs as the basic human need for love, acceptance and belonging. When social needs are not satisfied, this can lead to loneliness and social isolation. Loneliness and social isolation are directly linked to sickness and mortality (Cacioppo, Hawkley and Berntson 2003, Steptoe *et al.* 2013). The body of literature that illustrates the protective role of satisfied social needs on physical and mental health is quite substantial (Al-Kandari and Crews 2014; Avlund *et al.* 2004; Berkman and Syme 1979; Golden *et al.* 2009; Iecovich, Jacobs and Stessman 2011; Portero and Oliva 2007; Seeman 1996). Fulfilled social needs protect against diseases and depression and were also found to have a positive influence on self-esteem and life fulfilment (Miura and Agari 2006). Feelings of loneliness and social isolation are unwelcome and unhealthy for everyone and can be present regardless of age, sex and background. The fulfilment of social needs is therefore relevant for every individual. In this systematic literature review, we chose to focus specifically on community-dwelling older adults. In Western countries, the percentage of older people is growing rapidly (Gavrilov and Heuveline 2003). Moreover, in the last decade older people prefer to, and are expected to, remain community-dwelling as long as possible. Older people also tend to have fewer naturally social roles and consequently fewer social contacts caused, for example, by retirement and the absence of children living in their home. These demographic and societal developments underline the importance of studies focusing on the health and wellbeing of this specific group. For older people, the satisfaction of social needs is especially important for their general wellbeing (Antonucci 2001). Older adults with strong social relationships are able to maintain independence and live longer in community settings than are socially isolated older adults (Michael *et al.* 2001). Older people see their social lives and their social relationships as the most important determinants of successful ageing. They even value wellbeing and social functioning to a higher extent than physical and psycho-cognitive functioning (Von Faber *et al.* 2001).

Theories about changes in social needs with advancing age

Social relations and social needs change with age. Theories explaining the changes in social relationships when people age are the social convoy model

(SCM) of Antonucci (2001) and the socio-emotional selectivity theory (SST) of Carstensen (Carstensen 1993; Carstensen, Fung and Charles 2003). The SCM states that individuals go through life embedded in personal networks of individuals whom they give and from whom they receive social support (*i.e.* the convoys). In this theory, the concept of circles is used to separate people in terms of the closeness of their relationships with individuals. When ageing, the number of convoy members declines, especially in outer circles (Antonucci 2001). The SST of Carstensen (1993) claims that the social networks of older people are formed through network movements that are characterised by a process of selectivity and motivated by the emotional goals of older individuals (Carstensen 1993; Carstensen, Fung and Charles 2003). These two theories are similar in the sense that they both indicate that social network size decreases with age – the number of more peripheral members especially reduces – but that older adults maintain or increase their interactions with family and intimate friends. The difference in the two theories lies in the motivation for change. For Antonucci (2001), the primary factor lies in the changes of social roles. For example, the loss of work makes older adults focus more on close friends and relationships. For Carstensen (1993), the motivation is more developmental: with an increased sense of time limitations, people try to maintain emotionally meaningful relationships and discard the less important and potentially unpleasant ones. Besides the SST and the SCM, there is a third theory that explains social network changes when ageing: the Social Production Function Theory of Successful Aging (SPF-SA; Steverink, Lindenberg and Ormel 1998). This theory is a combination of a theory of needs, goals and resources and a theory of behaviour. The SPF-SA identifies three social needs: status, behavioural confirmation and affection. This theory explains the changes in social relations when ageing, by changes in goals and resources. Because the latter two diminish when one gets older, the needs of status and behavioural confirmation become more difficult to satisfy. With fewer resources, the need for affection is easiest to satisfy when one gets older (Steverink, Lindenberg and Ormel 1998). Factors associated with ageing, such as physical loss, lend more understanding to the changes in social network than age itself.

Steverink and Lindenberg (2006) also identify contradictions in current research about the social needs of older persons. On the one hand, the focus on emotionally and intimate relationships is being demonstrated by the SCM and the SST (Antonucci 2001; Carstensen, Fung and Charles 2003). On the other hand, evidence shows the positive effects on health and wellbeing of older people who stay socially active in community service and voluntary and productive social activities (Harlow and Cantor 1996). Also, there is a positive association between psychological and

physical wellbeing and having diverse and multiple social roles (Adelmann 1994). By focusing on the functions (affection, behavioural confirmation and status) rather than on the structure or density of the social relations, Steverink and Lindenberg (2006) give insights into the apparent contradiction of the changing relations of older adults and their association to wellbeing. They found that all three social needs remain important with increasing age (Steverink and Lindenberg 2006).

Objective(s) and relevance

When social needs of older people are met, this is often associated with higher levels of wellbeing and higher quality of life. However, a better insight into the characteristics of the social needs of this diverse population is much needed. With these insights we will be able to create more successful interventions. Although many interventions have already been created and implemented to help older people meet their social needs or to prevent loneliness or social isolation, they are rarely being evaluated or proven successful (Cattan *et al.* 2005; Fokkema and van Tilburg 2003).

The objective of this systematic literature review is to provide an overview of the available body of knowledge about the social needs of older people. Based on our findings, implications will be formulated for interventions that help older adults meet their social needs and therefore contribute to their wellbeing. The current study focuses on community-dwelling older adults. The main research question of this review is the following:

- What are the social needs of older people and what are the implications for interventions aimed at satisfying these needs?

Method

Search strategy

A systematic search of papers published between 2005 and 2016 was conducted. Papers of interest were expected to be published mainly in psychological and sociological journals. For this reason, the databases of PsycInfo and Sociological Abstracts were searched. The search was conducted on 29 November 2016. Studies of adults aged over 65 were included because this is often the age researchers use in empirical studies and the age at which people retire from work and focus more on their social environment.

The key words and search terms are presented in Table 1.

T A B L E 1 . *Keywords and search terms*

Population/target group	Topic
Older people	Social needs
Elderly	Social relationships
Seniors	Social values
Older adults	Social wellbeing
	Social support
	Connectedness
	Social network

Inclusion and exclusion criteria

Articles published between 2005 and 2016 were included in this literature review. The inclusion and exclusion criteria that are consistent with the aim of this literature research are as follows:

1. Inclusion criteria:
   (a) Empirical studies about social needs.
   (b) Community-dwelling adults aged over 65.
2. Exclusion criteria:
   (a) Study concerns special (medical) groups (*e.g.* patients, people with chronic illnesses, homeless people or earthquake survivors).
   (b) Study aims to establish the relationship between social life/social support and health/depression/loneliness.

Study selection and data extraction

The number of articles drawn from the two databases was 2,327. The selection process is shown by the flowchart in Figure 1. In the first selection phase, the duplicates (N = 57) were removed and all the remaining 2,270 titles were screened by one reviewer (TB). In this phase, the articles that met the inclusion criteria and the uncertain ones were brought forward into the second phase. In the second phase, two reviewers (TB/JS and TB/KL) independently screened the remaining 248 articles in abstract form. The two reviewers discussed the abstracts until they reached consensus on the articles that would go into the third phase. The two reviewers (TB/KL and TB/JS) then independently screened the 38 articles that remained after the second phase in a full-text form. Fourteen articles remained after this phase. One reviewer (TB) assessed all the remaining articles (N = 14) to find more relevant studies (snowball method). This resulted in one relevant publication, which, again, was positively screened according to title, abstract and full-text version by the three reviewers. In
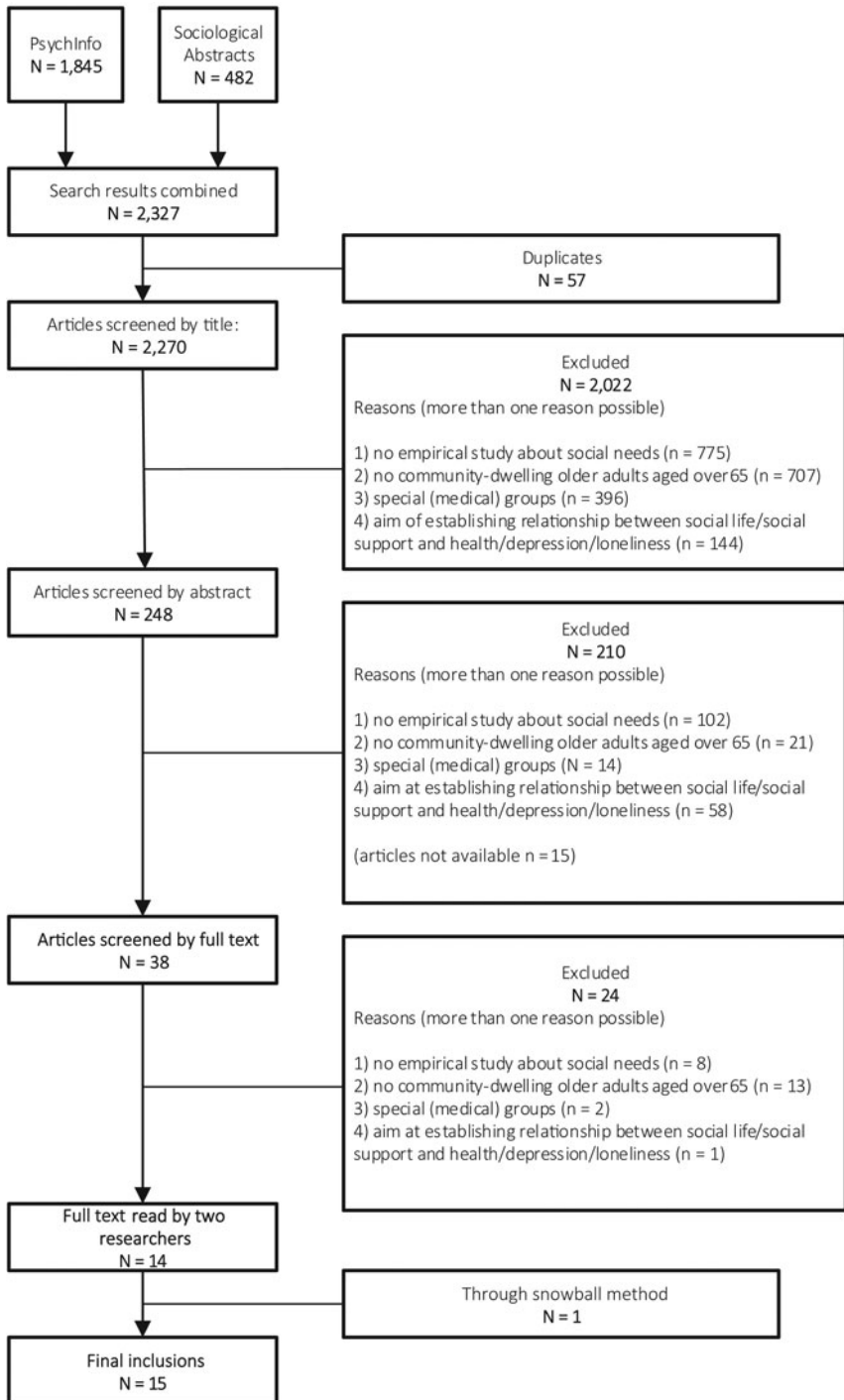
Figure 1. Selection process flowchart.

total, 15 articles were included in the systematic literature review. The three researchers independently analysed the selected articles and reached consensus about the most important outcomes and themes.

Assessment of methodological quality

The Mixed Method Appraisal Tool (MMAT) checklist (Pace *et al.* 2012) is an instrument that can be used to assess the selected studies in terms of their quality. This instrument can assess both mixed-method studies and pure qualitative and quantitative studies. The checklist has 21 criteria, divided over six categories: (a) screening questions (for all types); (b) qualitative; (c) quantitative randomised controlled trials; (d) quantitative non-randomised; (e) quantitative descriptive; and (f) mixed methods. There are three levels for the MMAT criteria: fulfilled, unfulfilled and unmentioned. Two reviewers (TB/KL or TB/JS) assessed independently all the included articles using the MMAT. Disagreements between the assessors were resolved by discussion. Articles that met more than half of the criteria were considered to have sufficient quality for participation in the study. The first two screening questions of the MMAT should, however, always be answered positively.

Results

General findings and quality assessment

Following the selection process, 15 unique papers were included (Figure 1). The 15 selected articles used a quantitative descriptive approach (N = 8), a qualitative approach (N = 5) or a mixed method (N = 2). The outcome of the quality assessment and the focus and outcomes of the selected articles are presented in Table 2. Percentages of MMAT outcomes were calculated to compare the methodological quality of the included articles: these ranged from 50 to 100 per cent (Table 2). Almost half the selected articles – six in total – had an MMAT percentage of 100 per cent. The article of Buys *et al.* (2015) scored 50 per cent of the MMAT checklist and was therefore not included. This means that 14 articles are included in this systematic literature review.

The MMAT criteria that were least frequently fulfilled by the included quantitative or mixed-method studies were the acceptable response rate (over 60%) and the influence (bias) of the researchers by the included qualitative and mixed-method articles. In three cases, the response rate was less than 60 per cent, and in two articles, the data were collected from a larger data-set, so the response rate was unknown. In five articles,

TABLE 2. *Research questions, findings and Mixed Method Appraisal Tool (MMAT) quality*

Authors and year	Research question(s)	Findings	Study design	Study quality (%)
Ashida and Heaney (2008)	What are associations of structural characteristics of social networks of community-dwelling older adults with their perceptions of the availability of social support and the level of social connectedness? What are associations of social support and social connectedness with older adults' self-reported health status?	Having frequent contact with network members was positively related with social support. Network density and having network members in close proximity were positively associated with perceived social connectedness. Social connect-edness had a positive relation with health status whereas social support did not.	MM	55 (6/11)
Buys *et al.* (2015)	How do older Australians establish and maintain social connectedness?	The breadth and depth of social connectivity varies among older adults in rural Australia. Participating in voluntary organisations can provide connectivity.	QL	50 (2/4)[1]
Buz *et al.* (2014)	Do the SCM and SST apply in a collectivist culture (Spain)? What are the relations between health, family, pubs and church and the maintenance of social networks?	Age shows highly complex relationships with network size and frequency of interaction, depending on the network circle and mediation of cultural factors. Family structure was import-ant for social relations in the inner circle, while pubs and churches were important for periph-eral relations. Pub attendance was the most important variable for maintenance of social support of peripheral network members. The results support applicability of SCM and SST.	QN	100 (4/4)
Chen and Chen (2012)	What is the influence of individual needs and family resources on living arrangements of the elderly? How is social participation associated with living arrangement preferences of the elderly?	Elderly people with higher socio-economic status prefer either independent living arrangements or co-residence with their children, elderly with more family resources prefer to co-reside with their children, and elderly people with adequate social support and/or contact networks prefer independent living.	QN	100 (4/4)
Cloutier-Fisher, Kobayashi and Smith (2011)	What are the subjective dimensions of social isolation?	Life experiences, family dynamics and long-term patterns of socialisation are subjective dimen-sions of social isolation.	QN	100 (4/4)

Conway *et al.* (2013)	What are the patterns of social network changes and network composition of different cultural groups (African-Americans, Caribbeans and US-born Caucasians)?	The network of the older adult is dynamic. The network is getting smaller, but also network members are being added. The older adults work actively in sustaining their social network. Caucasians are losing more network members from the peripheral network.	QN	75 (3/4)
Fiori, Consedine and Merz (2011)	How do patterns of social exchange (giving, receiving and reciprocity) vary as a function of attachment characteristics? And is this equally in kin *versus* non-kin networks?	Security was related to larger network size, greater reciprocity and less giving to kin, whereas dismissiveness was associated with smaller non-kin networks, greater reciprocity, less giving to kin and non-kin, and more relationships involving receiving from kin. Levels of fearful avoidance were associated with fewer reciprocal relationships and more receiving from kin.	QN	75 (3/4)
Gallagher (2012)	What are experiences of older adults with connectedness? What are the types of relationships and commitments that characterise connectedness among older people in Irish society? What is the significance of socio-spatial relationships for meaning in later life?	The older adults have a rich landscape of relatedness consisting of multi-dimensional relationships based on kinship and friendship. Older adults sustain communal ties, creating meaningfulness in their own lives and enhancing the lives of others. Engagement with others outside immediate family was a significant source of satisfaction and meaning of life.	MM	64 (7/11)
Krause (2007)	What are the relations between three forms of social support (enacted, negative and anticipated) and meaning of life?	Anticipated social support and emotional support from family members and close friends contributes to the meaning of life of older adults. Negative interaction lowers the sense of meaning of life.	QN	100 (4/4)
Neville *et al.* (2016)	How do persons aged over 95 years who live in their own homes remain socially connected?	Being socially connected meant keeping company: staying connected with family and friends, doing things together; engaging with paid and unpaid helpers; and having pride and enjoyment: continuing with hobbies and interests.	QL	75 (3/4)
Register and Scharer (2010)	Which processes are involved with connectedness in community-dwelling older adults?	Four processes involved with connectedness in older adults were identified (having something to do, having relationships, having a stake in the future and having a sense of continuity)	QL	100 (4/4)

TABLE 2. (*Cont.*)

Authors and year	Research question(s)	Findings	Study design	Study quality (%)
Steverink and Lindenberg (2006)	How do satisfaction levels of affection, behavioural confirmation and status, as three human social needs, relate to age, physical loss and subjective wellbeing?	Affection was relatively high and status was relatively low in all age and loss groups. The three needs relate differently to indicators of subjective wellbeing: affection and behavioural confirmation relate positively to life satisfaction; status and behavioural confirmation relate positively to positive affect and negatively to negative affect. The need for behavioural confirmation is more difficult to satisfy with high physical loss, but none of the three social needs becomes less important with advancing age.	QN	75 (3/4)
Toepoel (2013)	What are the relations between leisure activities and social isolation?	Leisure activities explain a significant part of older people's social connectedness. Voluntary work, cultural activities, sports, reading books, hobbies and shopping are found to be successful predictors for social connectedness of older people.	QN	100 (4/4)
Walker and Hiller (2007)	How do older women living alone perceive the physical and social dimensions of their neighbourhood?	A reciprocal and trusting relationship with neighbours relates to a sense of satisfaction with and feeling of security within the neighbourhood. The women draw on existing social networks and neighbours to sustain their independence and social connection within the community.	QL	75 (3/4)
Xie (2007)	How does the internet affect relationship formation and development online and offline?	There is little online interaction, internet is used for information, weak tie relations developed in computer course facilitate information exchange and social interactions during computer course provide opportunity to form friendships.	QL	75 (3/4)

Notes: SCM: social convoy model. SST: socio-emotional selectivity theory. MM: mixed method. QL: qualitative. QN: quantitative research. 1. Study not included because MMAT quality is 50 per cent or less.

the three researchers decided that insufficient consideration was given to the influence of the researcher. The data from the included articles were collected from respondents living in different parts of the world, six in the United States of America (USA), four in Europe (two in the Netherlands, one in Ireland, one in Spain) and one each, respectively, in Canada, Australia, New Zealand and Taiwan.

Themes

With the three theories (SST, SCM and SPF-SA) in mind, four themes emerged from the selected articles. The four themes that were most prominent were *diversity, proximity, meaning of the relationship* and *reciprocity.* The first theme was the most obvious one. In studying the social needs of older adults, researchers confirm the heterogeneity of the older population. Furthermore, it is interesting to look at cultural differences in the 14 studies from different parts of the world. The themes were also inspired by the three theories, SST, SCM and SPF-SA. Because SST and SCM focus on the difference in peripheral and intimate relations, proximity is an important theme to consider. Steverink and Lindenberg (2006) and Antonucci (2001), in their theories, have also looked at the functional characteristics of social relationships. Social support and connectedness are often discussed as functional characteristics of social networks; they have also been identified by Ashida and Heaney (2008) and by this study's authors as relevant topics in this literature review. These are all about the meaning of the relationship for the older person. When analysing the second (proximity) and third (meaning of the relationship) theme, a related theme emerged, namely reciprocity. In a relationship, whether it is peripheral or intimate, reciprocity is a reoccurring concept. It also plays a role in the third theme, namely the functional characteristics of the social relationship.

On the basis of the knowledge of social needs, this literature review intends to provide indications for successful interventions. Therefore, the paragraph 'Interventions' will present relevant findings about concrete interventions in relation to the four themes discussed in the 13 articles. Table 3 shows the four themes, including the information about interventions and the corresponding articles, and summarises the most important outcomes for each theme.

Diversity

Diversity refers to the individual and cultural differences between older individuals in terms of their social needs. The population of older adults is very heterogeneous; therefore, individual differences or diversity occur. Not

TABLE 3. *Themes, author, country and outcomes*

Author	Country	Results
Theme: diversity:		
Cloutier-Fisher, Kobayashi and Smith (2011)	Canada	Life experiences, family dynamics and long-term patterns of socialisation are important factors to consider when assessing social isolation.
Conway *et al.* (2013)	USA	Cultural differences between African-Americans and Caucasians in network change when ageing, faster rate of loss of peripheral members by Caucasians.
Fiori, Consedine and Merz (2011)	USA	The kind of attachment style has influence on the way older adults perceive and interpret messages from others. Probably perceptual biases in differences in perceived social support.
Krause (2007)	USA	Anticipated (so an expectation) social support is associated with deeper sense of meaning over time.
Register and Scharer (2010)	USA	The concept connectedness was viewed as somehow different by participants, one of four processes involved is 'sense of continuity', which is about feelings and individual perspectives.
Theme: proximity:		
Buz *et al.* (2014)	Spain	More frequent contact with inner circle members when ageing. Third places, like pubs and churches, are important for interaction with peripheral members.
Conway *et al.* (2013)	USA	More loss from peripheral network members when ageing, peripheral members get promoted to close network.
Gallagher (2012)	Ireland	Engagement with peripheral network members is source of satisfaction and meaning of life.
Register and Scharer (2010)	USA	Both close and peripheral relationships provide connectedness.
Toepoel (2013)	Netherlands	Peripheral network members from leisure activities provide social connectedness. Close friends relate to participation in leisure activities.
Walker and Hiller (2007)	Australia	Trusting and reciprocal relations with neighbours (peripheral) form an important part of the broader social support network.
Xie (2007)	USA	Peripheral relations formed in senior computer club contribute to enjoying the course.
Theme: meaning of the relationship:		
Ashida and Heaney (2008)	USA	Perceived social connectedness may be more important to health and wellbeing than perceived social support.
Buz *et al.* (2014)	Spain	Pub attendance is important for maintenance of social support from peripheral members.
Chen and Chen (2012)	Taiwan	People with adequate social support and/or contacts networks prefer independent living arrangements.
Gallagher (2012)	Ireland	Connectedness, as in engagements with others outside one's immediate family, is important for satisfaction and meaning of life.
Krause (2007)	USA	Anticipated social support and emotional support from family and close friends is important for deeper sense of meaning.

TABLE 3. (*Cont.*)

Author	Country	Results
Neville *et al.* (2016)	New Zealand	Remaining in own home was contingent on having strong social connections.
Register and Scharer (2010)	USA	Connectedness provides older adults with a mechanism to engage in meaningful, positive and purposeful ways.
Toepoel (2013)	Netherlands	Leisure activities explain a significant part of older people's social connectedness.
Theme: reciprocity:		
Fiori, Consedine and Merz (2011)	USA	Security of attachment was related to greater reciprocity.
Gallagher (2012)	Ireland	Older people contributing to the lives of others, as in voluntary work, is important for connectedness.
Register and Scharer (2010)	USA	Involvement in meaningful and reciprocal relationships was a central focus for all participants. Having something to do, contributing by doing volunteer work.
Walker and Hiller (2007)	Australia	Trusting and reciprocal relationships with neighbours contribute to satisfaction with neighbourhood and to the social support network.
Interventions:		
Ashida and Heaney (2008)	USA	Favour for instrumental support provided by formal agencies not members of own networks. Effort to help community-dwelling older adults develop and enhance availability of social relationships that allow them to feel socially connected. Increasing the number of network members living in close proximity and increasing network density, Concretely this means: facilitate participation at public places such as community or senior centres.
Buys *et al.* (2015)	Australia	Participating in voluntary organisations can provide connectivity.
Buz *et al.* (2014)	Spain	Pubs, churches and other third places provide social connectedness. Rather than age related facilities inter-generational access is preferred.
Chen and Chen (2012)	Taiwan	Increasing economic security for older people, a stable pension system for financial independence and encouraging social participation.
Gallagher (2012)	Ireland	Draw on resources of older people themselves.
Toepoel (2013)	Netherlands	Stimulating participation in leisure activities. Facilitate their connection with others via leisure activities. Develop special programmes to select, train, and stimulate close contacts, that contribute to leisure participation and social integration. Favour for intergenerational programmes.
Walker and Hiller (2007)	Australia	Involve older women in planning and developing activities that might encourage the relationship between neighbours. Strategies for safety in a neighbourhood should be in balance with desire for privacy and independence. Services should support vulnerable women, in facilitating practical help. So promote independence, social connection and security in home and neighbourhood.

Note: USA: United States of America.

everyone needs a big and dense network; this depends on the individual's life experiences and personality. Cloutier-Fisher, Kobayashi and Smith (2011) have clearly demonstrated that some people are perfectly happy with a small and mostly peripheral network: so-called loners. This is also the case in studies by Gallagher (2012) and Walker and Hiller (2007), where some of the participants state that they do not feel the need to be socially active or join a club and prefer to be on their own. The less-connected respondents were not automatically lonely or dissatisfied with their lives. Therefore, assessing a person's social needs is about the subjective perception and expectations he or she has. Objective assessment of the quality of someone's social network is difficult. For example, Krause (2007) demonstrates that the kind of social support most relevant to meaning of life is anticipated support. This means that expectations matter, perhaps even more than the objective and measurable aspects of social networks. Social connectedness, the presence of social ties, is also a difficult concept to measure objectively. For this reason, Ashida and Heaney (2008) discuss perceived connectedness as a partly subjective concept.

Besides individual differences, cultural differences play a role. Whereas in Asian countries adult children play an important role in providing social support and housing for their parents, in Western countries parents depend less on their adult children (Chen and Chen 2012). Recently, in Asian countries, older adults with sufficient social resources other than their direct family also prefer more and more to live independently. The researchers' interpretation is that older adults do not want to be a burden on their children and family and choose to stay independent as long as possible (Fiori, Consedine and Merz 2011; Krause 2007). Conway *et al.* (2013) found ethnical differences in changes in social networks. Caucasians are losing more network members from their peripheral networks than African-Americans. The authors suggest that this might be due to the fact that African-American older adults sometimes have 'extended kinship', which means they include non-biologically related individuals in the family (Conway *et al.* 2013). Therefore, peripheral members of their network become close network members.

Proximity

When examining the structure of the relationships of (older) people, researchers must take into consideration the proximity of the relationships. Networks of people in general tend to shrink as people age due to loss of work, loss of social roles or loss of health, and sometimes, through the purposeful choice of older adults (Buz *et al.* 2014; Steverink and Lindenberg

2006). In social networks of older adults, the loss of peripheral members is larger than the loss of intimate members (Buz *et al.* 2014; Conway *et al.* 2013; Steverink and Lindenberg 2006). Conway *et al.* (2013) suggest that older people may compensate for the loss of intimate network members by promoting members from a peripheral position to a closer network position. Therefore, when ageing, the size of the social network often diminishes, as does the number of frequent contacts with both peripheral and intimate network members (Conway *et al.* 2013; Toepoel 2013). On the other hand, older adults are more satisfied with the contacts they have and feel more connected to other people (Toepoel 2013).

Both intimate and peripheral relationships contribute to the wellbeing of older adults (Steverink and Lindenberg 2006). Register and Scharer (2010) explain that both close and peripheral relationships provide a sense of connectedness. Therefore, it is not only relationships with kin and intimate friends that satisfy social needs but also relationships with neighbours and non-intimate friends from clubs, pubs and churches. For people with small social networks, both peripheral members and close members can help in terms of coping with loss and grief. For example, people find comfort in playing golf or going to church when dealing with the loss of a loved one (Cloutier-Fisher, Kobayashi and Smith 2011). The peripheral relations with neighbours are important in more than one way. Besides contributing to a feeling of connectedness, they also provide safety and security. Safety is one of the most important concepts for older people (Walker and Hiller 2007). Ashida and Heaney (2008) found that, for older people, the geographical proximity of a social network is important to their feeling of social connectedness. Besides being connected to their neighbours, older adults can feel connected to the physical area or neighbourhood in which they live (Gallagher 2012; Walker and Hiller 2007). Our results show that peripheral relationships are also of great importance to older people, and losing members of this peripheral network does not always seem to be a deliberate choice.

Meaning of the relationship

Meaning of the relationship refers to the functions or meaning the relationship has for older individuals. In this context, two important concepts are social support and social connectedness (Ashida and Heaney 2008). Social connectedness is the presence of social ties. Social support is the support network members give to each other, which can be emotional, instrumental, informational or appraisal. Seven of the included articles discuss the concepts of social connectedness and/or social support. Both social support and social connectedness contribute to the meaning of life

of older adults (Ashida and Heaney 2008; Krause 2007; Neville *et al.* 2016). Studies focusing on connectedness all indicate that it is important for older people in terms of giving them a sense of meaning in life (Gallagher 2012; Neville *et al.* 2016; Register and Scharer 2010; Toepoel 2013). As Register and Scharer (2010) explain in their article (page 463), 'connectedness provides older adults with a mechanism to engage life in meaningful, positive and purposeful ways'. According to Register and Scharer (2010), connectedness can be seen as the ultimate expression of human existence that determines how people engage with the world. Ashida and Heaney (2008) identify social support as a more functional construct whereas social connectedness has a more emotional dimension. While social connectedness and social support do overlap and are positively associated with each other, they differ in terms of their associations with social network characteristics and health status (Ashida and Heaney 2008): social connectedness has a positive association with health status whereas social support does not. Gallagher (2012) also found that less-connected groups rate their own health as bad. As Gallagher (2012) shows, bad health can influence engagement with others (Gallagher 2012), but being unconnected can also cause physical problems (Ashida and Heaney 2008). It probably works both ways. Toepoel (2013) argues that people connect with each other by participating in leisure activities. There is a fun and light dimension to the construct of connectedness as identified by Gallagher (2012) and Buz *et al.* (2014). Just visiting a pub contributes to a feeling of connectedness and wellbeing. Going to a pub also contributes to giving and receiving social support, as Buz *et al.* (2014) found in their study. Informal conversations about sports, politics and gossip are important for older adults (Gallagher 2012). An overlap can be found between connectedness and being socially active in more peripheral relations involving leisure activities, going to pubs and going to church (Buz *et al.* 2014; Gallagher 2012; Toepoel 2013). Therefore, both intimate and peripheral relations provide older adults with connectedness and social support, both of which contribute to wellbeing (Ashida and Heaney 2008; Buz *et al.* 2014; Gallagher 2012; Neville *et al.* 2016; Register and Scharer 2010).

Social support seems to have an ambiguous relationship with independence. According to Gallagher (2012), older adults have a great longing for independence and do not want to be a burden, especially not on their children and family. On the one hand, receiving social support can contribute to independence (Chen and Chen 2012). Receiving (social) support can enable older people to live longer independently and not go into a residential home. However, receiving instrumental social support can also diminish the sense of independence on older people (Krause 2007). In this study, older adults who receive more tangible forms of social support

have a lower sense of the meaning of life, which Krause explains as a perceived lack of independence.

Steverink and Lindenberg (2006) confirm the importance of both looking at the structure of the relationships and the functions (or meaning) of the relationships in the network. They identify three functions of social relationships that relate to social need fulfilment and wellbeing, which are affection, behavioural confirmation and status. Affection includes love, trust, acceptance, empathy and understanding, which are mostly found in intimate social networks. Behavioural confirmation and status are related to the peripheral social networks. Behavioural confirmation includes doing the right thing and being useful, which, for example, can be accomplished by doing volunteer work and building more peripheral networks. Studies by Gallagher (2012), Toepoel (2013) and Register and Scharer (2010) have confirmed this. Status consists of getting respect, being independent and autonomous, and having skills, which are also found in more peripheral networks. Krause (2007) and Chen and Chen (2012) have also identified independence as an important social aspect of older people. Assuming that needs such as behavioural confirmation and status remain as important to older adults as affection, these authors have shed light on the apparent contradiction that older adults, on the one hand, tend to focus on intimate friends and family and, on the other hand, need to stay active and participate in peripheral networks. When goals and resources diminish with age, it becomes more difficult to satisfy these needs. This results in a loss of more peripheral members of their networks.

Reciprocity

Reciprocity means not just receiving but also giving support and friendship, helping others and contributing to a community or society. The older person is not just a frail and vulnerable individual but is capable of giving back to others and to society (Gallagher 2012; Toepoel 2013). The older adult wants to give back to society, *e.g.* by doing volunteer work (Gallagher 2012; Register and Scharer 2010; Toepoel 2013). Reciprocity in friendships contributes to the feeling of independence and being meaningful. For example, receiving instrumental support diminishes older people's sense of meaning and independence. When older people return a favour, for instance, by giving back support, they feel less dependent (Krause 2007). Reciprocity relates to wellbeing (Krause 2007). In Register and Scharer's (2010) study, all the participants experienced involvement in meaningful and reciprocal relationships as the central focus of their life. In Walker and Hiller's (2007) study, women who lived

alone found that trust and reciprocal contact with neighbours contributed to their social network and to the satisfaction they felt in the neighbourhood. Gallagher (2012) finds the same in his study in two communal settings in Ireland: when older people both give and receive practical help, it contributes to their satisfaction with life. To do volunteer work or help neighbours can also sometimes satisfy the need of older people to have something to do (Register and Scharer 2010). Fiori, Consedine and Merz (2011) examine the relationship between attachment style and social support. People with a secure style of attachment (as opposed to a dismissive or fearfully avoidant style) reported a larger network size and greater reciprocity in their relations.

Altruism, *i.e.* doing someone a favour without expecting something in return, can be considered a higher level of reciprocity. Gallagher (2012) discusses altruism in his study of the connectedness of the lives of older adults in Ireland. The most connected participants showed altruism and practical social concern in the voluntary work they do. They had a strong feeling of awareness of the need of others, and derived a lot of satisfaction from the voluntary work they do. Register and Scharer (2010) also discuss this form of altruism, which contributes to the feeling of connectedness of older people. Participants found purpose and meaning by helping others in the community. The older people perfectly understood the importance of contributing to a neighbourhood for their own and others' wellbeing (Gallagher 2012; Register and Scharer 2010).

Reciprocity overlaps with proximity (the second theme) and the meaning of relationships (the third theme). As discussed above, reciprocity is important in both close and peripheral relationships. It is also related to the meaning of relationships. The meaning of a relationship seems stronger when reciprocity occurs. It is similar to glue, binding together the social networks of older people and creating connections to the community and to society.

Interventions

This systematic literature review intends to identify implications for successful interventions based on the information about social needs captured in the four themes. The researchers found that the authors in the 14 articles often discussed valuable information about interventions. In this paragraph, this information is summarised. First and foremost, corresponding to the first theme of diversity, one should respect individual differences (Cloutier-Fisher, Kobayashi and Smith 2011). One type of intervention will probably not be successful for all older people who are facing problems with loneliness or social isolation, which means that individual requirements

should be considered (Cloutier-Fisher, Kobayashi and Smith 2011). In creating and implementing interventions, diversity in life circumstances and health status must be taken into consideration.

In relation to proximity (the second theme), Ashida and Heaney (2008) and Gallagher (2012) discuss the importance of having social relationships and being involved with others, especially with people living in close proximity. Seniors should be stimulated by having pleasurable contact with neighbours and with peripheral members of their networks, such as social clubs and organisations (Buz *et al.* 2014; Gallagher 2012; Neville *et al.* 2016; Toepoel 2013; Xie 2007). Gallagher (2012) states that such forms of social intercourse contribute to solidarity and belonging. Joining a senior computer club contributes to formatting valuable (offline) companionships (Xie 2007). Ashida and Heaney (2008) advise policy makers to help people form relationships. Both Buz *et al.* (2014) and Gallagher (2012) discuss the importance of pubs and churches where older people can become connected. In Spain and Ireland, the pub is the place where older people meet each other. Churches have a similar role in satisfying social needs. Buz *et al.* (2014), Gallagher (2012) and Register and Scharer (2010) all identify the important role of churches as social meeting places. Besides this, a relationship with God contributes to the feeling of connectedness of older adults (Register and Scharer 2010).

Besides focusing on the meaning of relationships (the third theme), almost half the discussed articles offer recommendations regarding the need of older people to be (socially) connected (Ashida and Heaney 2008; Buz *et al.* 2014; Gallagher 2012; Register and Scharer 2010; Toepoel 2013). For instance, Toepoel (2013) recommends promoting participation in leisure activities to help older adults connect with others. She advises policy makers to develop special programmes to select, train and stimulate close contacts, which contribute to leisure participation and social integration. Going to a pub is different from going to a senior centre because members of all generations come to socialise and have a good time in pubs, whereas senior centres focus only on seniors. Toepoel (2013), Gallagher (2012) and Buz *et al.* (2014) discuss the need of older adults to connect with people outside their own age group. In their view, policy makers should focus on the need of older adults to access intergenerational places and contacts. Finally, Walker and Hiller (2007) and Gallagher (2012) identify the importance of the neighbourhood in the lives of older people. Policy makers can improve neighbourhoods by making them safe and clean and by promoting social cohesion (Walker and Hiller 2007). Register and Scharer (2010) recommend that health-care professionals should be more aware of the beneficial effects of connectedness on the wellbeing of older people.

Corresponding to reciprocity (the fourth theme), Gallagher (2012) mentions the need of older people to engage in meaningful activities by drawing on their own resources. Older people want to use their talents and skills to find solutions to the problems they and others face. In doing volunteer work and helping others, older people find meaning and joy (Gallagher 2012). Furthermore, Chen and Chen (2012) and Walker and Hiller (2007) identify independence as important for older adults. They advise policy makers to promote older adults' independence by means of practical solutions such as a good pension and the possibility for independent living (Chen and Chen 2012) and by creating safe neighbourhoods (Walker and Hiller 2007).

Discussion

In this systematic literature review, 14 articles about the social needs of older community-dwelling adults have been analysed, resulting in four themes, namely diversity, proximity, meaning of relationships and reciprocity. The paragraph 'Interventions' emphasises relevant information for interventions aimed at improving the social wellbeing of older adults, for instance respect for individual differences, creating relationships and connectedness, and the need of older people to contribute to society. Together, this provides concrete information about social needs and the ability to satisfy these needs, which, in return, generates the elements of a successful intervention.

This systematic review offers insight into the social needs of older adults. Social needs include the need to give and receive friendship, companionship and love with intimate and peripheral contacts. This study reveals the social needs of older adults in a concrete sense (*i.e.* relationships, social networks social support) and a more abstract sense (*i.e.* feelings of connectedness and reciprocity). In terms of satisfying the social needs of older adults, subjectivity and cultural differences also play a role. Satisfaction is a feeling, and feelings are not objective but are different for every individual. Due to the long lifespan and, therefore, the many different experiences that older people have today, the population is more heterogeneous.

Both intimate and peripheral relationships satisfy older adults' social needs and continue to be important as people age (Cloutier-Fisher, Kobayashi and Smith 2011; Gallagher 2012; Neville *et al.* 2016; Register and Herman 2010; Steverink and Lindenberg 2006; Toepoel 2013). More peripheral relationships, such as contacts at clubs, churches and pubs, will help adults participate in and contribute to society and will make them feel a part of life and of society; in other words, they will

make them feel connected. Whereas more intimate relationships bring love and belonging into the lives of older people, peripheral relationships offer fun, friendship and equality. When it comes to satisfying social needs, loneliness can be prevented. De Jong Gierveld and Van Tilburg (2008) identify two types of loneliness: social and emotional loneliness. Social loneliness is the lack of an adequate social network, whereas emotional loneliness is the lack of a partner or close friend. Social loneliness can be considered the lack of a more peripheral network. Emotional loneliness, on the other hand, is the lack of a more intimate and close network. Both types of loneliness influence wellbeing. This is congruent with our finding that intimate and peripheral relationships must be considered when it comes to satisfying people's social needs. Proximity, the name of the corresponding theme, is important in both an emotional and a practical sense; sometimes, the proximity of a neighbour can satisfy a social need as well as a close relative can.

Older people's connection to others and to their neighbourhood or their society is of great value and an important concept when it comes to satisfying social needs (Gallagher 2012; Register and Scharer 2010; Walker and Hiller 2007). Connectedness can solve the basic social problem of alienation, isolation and loneliness, which older adults sometimes have (Rowe and Kahn 1997). It appears that older adults want to be connected with other people (in both a close and a peripheral sense) and to their neighbourhood, community and society.

Reciprocity is highly valued by older adults. They want to receive and give friendship, companionship and love to intimate and peripheral relationships. They also want to participate in society by doing volunteer work (Gallagher 2012; Toepoel 2013; Walker and Hiller 2007). Furthermore, reciprocity contributes to a feeling of independence, which is highly valued by older individuals (Chen and Chen 2012; Krause 2007; Walker and Hiller 2007).

Older adults also want to be socially active and participate in their community and society. Older adults want to contribute to society in a valuable way, and this contributes to their health and life expectations. As Diamond (2012) states, the way we treat older people in Western societies can be improved in comparison with other cultural settings. We can use the talents of older adults more effectively, as societies in the Blue Zones are doing. Blue Zones are areas in the world where people live significantly longer and healthier lives. Buettner (2012) has identified five of these areas: Sardinia (Italy), Okinawa (Japan), Loma Linda (California), Nicoya Peninsula (Costa Rica) and Icaria (Greece). Besides a healthy diet and exercise, one of the reasons for older people's expanded lifespan is the perception and role of the older adult in the community. They are highly valued and respected and considered to be wise and erudite (Buettner 2012).

Three theories about the social networks of older people, the SST, the SCM and the SPF-SA, offer us abstract information about changes that occur during ageing. Although the population of older adults is rather diverse, these theories are modelled on the whole population of older adults. When examining the structures of (older) people's relationships, researchers have to take into account the proximity of the relationships. This is especially pronounced in the SST and SCM theories. A distinction is made between close or intimate relationships, such as family and close friends, and peripheral relations, such as acquaintances, neighbours or people at (sports) clubs. Studies by Buz *et al.* (2014) and Conway *et al.* (2013), which show a greater loss of peripheral members compared to intimate members in older people's social networks, have confirmed the claims of SCM and SST. Furthermore, these theories state that older people focus more on close relationships due to selectivity or their changing social roles. However, in this systematic literature review, it became evident that peripheral relationships cannot be ignored. The SPF-SA theory of Steverink and Lindenberg (2006) offers an explanation of this by stating that status and behavioural confirmation, which are mostly satisfied by having peripheral relationships, remain important. However, due to loss of resources and goals, they become difficult to satisfy. While reciprocity has been identified as an important concept in relation to the social needs of older people, this concept is not explicitly part of the three theories discussed here.

One can argue that when social needs are not satisfied, it can lead to social isolation and/or loneliness. Both social isolation and loneliness are relevant concepts when it comes to studying the social lives of older people, but they are not captured in this review. The reason behind this choice of focus is the assumption that identifying social needs and satisfying these needs can prevent loneliness and social isolation.

The selected articles in this review were published between 2005 and 2015. One could argue that the social needs of older people have not changed much over the years and that articles from before 2005 would contain relevant information about this topic. Although this literature review provides implications for interventions, this was not a search term or key term. This choice was made because the main focus is on social needs. By extracting concrete information about these needs, implications were identified about possible successful interventions.

Although this systematic review has a specific focus on the group of community-dwelling older people who have no special medical condition, it should be taken into consideration that even this specific group is still very heterogeneous in terms of life circumstances such as living situation and health status. Community-dwelling, for example, can mean living

independently in rented accommodation, in a large villa or living in sheltered housing. Differences in health status may also affect the social needs of the older adults. Although these differences were not addressed explicitly in the articles that were included in this review, they may have influenced the findings. An important consideration for interventions is, therefore, that there is not one intervention that will work for everyone, but that individual solutions must be sought that meet individual needs.

This literature review shows that older adults play an active role in their own (social) lives. They do not passively respond to the ageing process. Older adults want to have an active role in their whole environment, including their own social network, their neighbourhood and their community. Service providers and policy makers must consider that a lack of meaning in life becomes one of the most pressing problems when people age. Based on the results of this literature review, the most important considerations for creating and implementing interventions that may help older people satisfy their social needs are:

- Promote active involvement
  - Involve older people in creating and implementing interventions.
  - Focus on leisure activities and volunteer work: older people want to stay active and contribute.
  - Enable reciprocity: older people do not want to consume only.
- Show respect
  - Respect individual differences by assessing individual social needs.
  - Address the talents and skills of older people.
  - Create intergenerational initiatives: older people prefer not to be treated as a separate group.
  - Focus on independence: older people want to stay active and independent as long as possible.

- Stimulate social contacts
  - Focus on creating both close and peripheral relationships.
  - Stimulate neighbourhood initiatives: proximity and peripheral contacts with neighbours are highly appreciated and beneficial for wellbeing.
  - Facilitate (intergenerational) social meeting places such as pubs and churches.

- Sharing knowledge
  - Organisations providing care for older people and policy makers should be (made) aware of the importance of satisfying social needs.
  - Organisations providing care for older people and policy makers should be (made) aware of important characteristics of interventions

aimed at satisfying the social needs of older adults, as mentioned before.

The future work of the authors of this literature review will focus on these implications. We will create and implement an intervention that will aim to satisfy the social needs of older people and hopefully contribute to their quality of life.

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