Frailty among older adults: exploring the social dimension

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Experiences of social frailty among rural community-dwelling and assisted-living older adults: a qualitative study

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Abstract

Although social frailty has been described from a theoretical perspective, the lived experiences of older adults regarding social frailty are yet unknown. In this paper, we aim to 1) gain more in-depth insights into community-dwelling and assisted-living older adults' experiences of social frailty and 2) explore the differences in these experiences between these two groups. We conduct a thematic analysis of 38 in-depth interviews with community-dwelling and assisted-living older adults in villages in the northeastern part of the Netherlands. We structure our findings along three overarching themes, which highlight different aspects of the social frailty experiences of our participants: 1) present resources and activities to fulfil social needs, 2) resources and activities that have been lost, and 3) how they manage and adapt to changes in resources and activities over time. More specifically, loneliness is only reported among the community-dwelling participants, while the loss of mobility and participation in (social) activities is experienced most strongly by the assisted-living participants. These findings challenge the widespread policies and practices of *ageing in place*. We conclude that for some older adults, living in assisted arrangements is preferred over ageing in place, as doing so can prevent (further) social frailty. The key reason for this is that life in assisted living is likely to bring about new social resources and activities, which may serve to fulfil the social needs of older adults.

Introduction

Frailty is a concept that describes a decreased reserve capacity and resistance to stressors that cause vulnerability to adverse health outcomes, and the concept covers the physical, psychological and social domains (Fried *et al.* 2004, Gobbens *et al.* 2010). Although the physical domain of frailty has been described and investigated quite extensively (Clegg *et al.* 2013, Fried *et al.* 2004, Parks *et al.* 2012), the concepts of psychological and social frailty are rather unexplored (Gobbens *et al.* 2010), with the concept of social frailty being the least explored of all. Previously, arguing from a social needs concept, we defined social frailty as a continuum of being at risk of losing or having lost resources, activities, or abilities that are important for fulfilling one or more basic social needs during the life span (Bunt *et al.* 2017).

The concept of social frailty is important in the context of current policy changes. In contemporary Western countries, there has been a change in policy from collective solidarity to individual responsibility, which urges older people who are in need of care and assistance to primarily rely on their informal social relations and social environment and to remain living in the community. In line with this policy, traditional residential care homes have been shut down on a great scale in the Netherlands (Verbeek-Oudijk and Campen 2017). This process is in line with the inclinations of older adults who prefer to stay in their own home for as long as possible. However, community-dwelling older adults in need of care might be more at risk of becoming especially socially frail when their informal network is not able to have a (significant) role in their social needs fulfilment. Social participation may have a protective or balancing function in the frailty levels of community-dwelling older people (Duppen *et al.* 2019) because it may affect the quality and quantity of their social resources and their social needs fulfilment and thus decrease their social frailty. Important reasons for older adults to consider moving to assisted living, next to physical reasons, are indeed related to social factors, i.e., people hope and expect to improve in regard to social needs fulfilment (Steverink 2001). So far, however, it is unknown whether community-dwelling older adults differ from assisted-living older adults in their social frailty experiences. It is also unknown whether there are differences between urban and rural settings in the experiences of older adults' social frailty. However, social isolation and loneliness, which are concepts closely related to social frailty, are more common among older adults living in rural areas (Drennan *et al.* 2008, de Koning *et al.* 2017). Therefore, older adults living in rural areas might be more likely to experience social frailty than their counterparts in urban settings.

Our definition of social frailty (Bunt *et al.* 2017) refers to a multidimensional concept referring to a variety of general and/or social resources (or restrictions), social behaviours and activities, and self-management abilities, which all have a function related to adding to (or affecting) social needs fulfilment (Figure 1). People have basic social needs, which, similar to basic physical needs, need to be satisfied to experience subjective well-being (Steverink and Lindenberg 2006). When social needs are not satisfied, this will lead to mental and physical health problems (Cacioppo and Hawkley 2003). Fulfilled social needs protect against disease and depression (Avlund *et al.* 2004, Golden *et al.* 2009, Portero and Oliva 2007) and have a positive influence on both life fulfilment (Miura and Agari 2006) and subjective well-being (Steverink and Lindenberg 2006, Steverink *et al.* 2019).

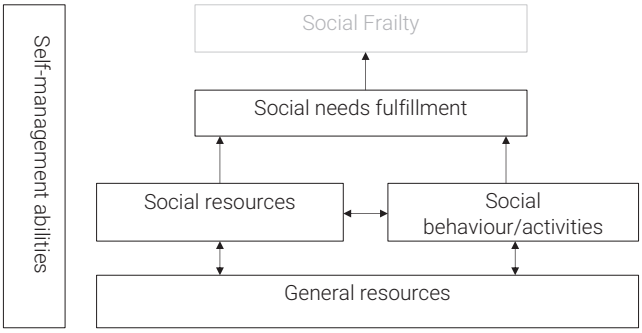

Figure 1. Conceptual model of social frailty

The theory that we previously used to define the concept of social frailty (Bunt *et al.* 2017) is social production function theory (Lindenberg 2013, Ormel *et al.* 1999, Steverink and Lindenberg 2006, Steverink *et al.* 2019). In this theory, three basic social needs are distinguished: affection, behavioural confirmation, and status. Affection is the fulfilment of the need to love and to be loved regardless of one's assets or actions. Behavioural confirmation is the fulfilment of the need to feel that one is doing the 'right' thing according to relevant others and oneself and to be part of a group with shared values. Status is the fulfilment of the need to distinguish oneself from others by means of specific talents or assets (Lindenberg 2013, Steverink 2014). All three of these social needs remain important with increasing age, although the opportunities and resources that are available to fulfil these social needs are subject to change during the life span (Steverink and Lindenberg 2006). In the common conceptualisations of social frailty thus far, the three different social needs (affection, behavioural confirmation and status) are difficult to distinguish separately because the resources, activities and abilities in the literature are formulated rather generically. This means that they could not be assigned to specific needs. For

example, social participation is a general activity that might contribute to all three needs (Bunt *et al.* 2017). The abilities that people use to gain or maintain (social) resources and activities for well-being are considered self-management abilities in the theory of the self-management of well-being (Steverink and Lindenberg 2008, Steverink 2014). People who have better self-management abilities directed at the fulfilment of their basic physical *and* social needs experience more well-being (Goedendorp and Steverink 2016).

A more detailed and in-depth elaboration of the social resources, activities and abilities that are needed to satisfy social needs would deepen (the components of) the concept of social frailty. Such resources, activities and abilities would include, for instance, having a caring spouse as a resource, being a member of a sports club as a social activity, and being able to manage social resources. To our knowledge, the lived experiences of community-dwelling and assisted-living older adults living in a rural area regarding social frailty are yet unknown. The aims of this study are (a) to gain more in-depth insights into community-dwelling and assisted-living older adults' experiences of social frailty and (b) to explore whether there are differences in these experiences between community-dwelling and assisted-living older adults living in a rural area.

Methods

Research approach

To obtain more in-depth insights into the experiences of social frailty, we applied a qualitative approach. Such an approach is well suited to uncover the meaning that people give to their experiences and to provide depth, detail and nuance to the research issue (Hennink *et al.* 2020). In this study, a secondary analysis of an existing qualitative dataset was carried out. This is known as the *supplementary analysis of qualitative data*, which is a more in-depth analysis of an emergent issue or aspect of the data that was not, or only partially, addressed in the primary study (Heaton 2008). The primary study was performed with the goal of exploring older adults' experiences of subjective well-being (Douma *et al.* 2015). Social frailty emerged as a relevant aspect from the data, which we decided to examine further in this paper. Three of the authors of the current study (LD, LM and NS) were involved in the primary study for which the data were collected.

Participant recruitment

The primary dataset consisted of 76 transcripts of in-depth interviews with older adults living in either rural villages or a small town in the northeastern part of the Netherlands. Initial contact with the participants was made via local gatekeepers who were in contact

with older adults due to their profession. Different strategies were applied for participant recruitment, for example, via personal visits, advertisements or snowballing (for a detailed description, see Douma *et al.* (2015)). Participants had to be 65 years or older, which at the time of recruitment was the official retirement age. The sample size was not defined in advance, and data collection was continued until there was data saturation by gender, age, housing arrangement (community-dwelling and assisted-living) and domicile (urban and rural). Participants living in housing facilities with in-home assistance (i.e., service flats, sheltered accommodations, and nursing homes) were considered to be assisted-living participants (Douma *et al.* 2015). For this secondary analysis, we used the 38 interviews that were collected from the participants living in villages who were involved in the primary study. These villages, which represents the rural part of the initial data, was chosen because it is likely that social frailty plays a larger role in this rural area than in the urban part of the data.

Data analysis and procedure

We applied a hybrid deductive/inductive qualitative analysis of the data (Fereday and Muir-Cochrane 2006) to both add to our conceptualisation of social frailty (Bunt *et al.* 2017) and enable inductive inferences on the issue.

We performed a thematic analysis, which was grounded in our theoretical definition of social frailty (Bunt *et al.* 2017). We coded the transcripts to identify any potentially relevant themes around social frailty that were discussed during the interviews by the participants. In so doing, we used the components of our conceptual model of social frailty (Figure 1), the fulfilment of social needs, social resources, social behaviours and/or activities, general resources and self-management abilities, but we also created codes that emerged from the data. This process resulted in three main themes: the social resources and activities that are present, those that have been lost, and the ways in which the participants manage and adapt to changes. Finally, we compared the experiences of community-dwelling older adults with those who are living in assisted-living arrangements to gain insight into possible differences between these groups regarding the three overarching themes. For this purpose, code-document tables were created and analysed by comparing the resulting quotations between the two groups.

To enhance the reliability of the coding process, two interviews were coded by two researchers of the research team (SB and LM), and the coded documents were compared. Differences in coding between the researchers were discussed, and the codebook was adapted. For example, general resources were coded differently by the two researchers in the first interview. After discussion, only general resources that were related to fulfilling

social needs were coded. After that, one more interview was coded and compared by the two researchers, and no relevant inconsistencies remained.

Findings

Of our 38 participants, 26 were community-dwelling older adults, and 12 were residing in an assisted-living environment. The characteristics of the participants are described in Table 1.

Table 1. Participant characteristics (N=38)

Characteristics	N
Gender	
Male	11
Female	27
Age group	
65-74 years	16
75-84 years	12
85 years and older	10
Housing arrangement	
Community-Dwelling	26
Assisted-Living	12

To offer a general idea of the similarities and differences between the experiences of the community-dwelling and assisted-living older adults who participated in this study, we present two personas (Figure 2). Personas provide a concrete and vivid representation of important characteristics of the archetypes of participants (Holden *et al.* 2018). Quotes from different interviews have been used to compose these stories and have been adjusted textually to increase readability.

Three overarching themes emerged from our analysis, which highlight different aspects of the social frailty experiences of our participants: 1) present resources and activities that are used to fulfil social needs, 2) resources and activities that have been lost, and 3) how they manage and adapt to changes in resources and activities over time. All the findings are presented along these three themes, both for community-dwelling and assisted-living older adults, and are illustrated with quotes from the interviews. For every theme, the differences between community-dwelling and assisted-living older adults are presented. For readability purposes, we present all the quotes in Table 2.

A) Name and age: Mrs. Jansen, 93 y/o

Living situation: She lives in her own detached villa in the community of a small rural village. She has lived there for many years; she raised her children there.

Family situation: Mrs. Jansen is a widow; she has one son who lives nearby. She does not have grandchildren.

"My son comes around every day. Together with the home care, he helps me with keeping my house clean. He also goes to the supermarket for me. A few days a week, I cook for myself; the other days, they bring a warm meal. Every two weeks, I drink tea with two friends of my own age; we have done this for many years. These friends also still live on their own like me; we take turns visiting each other's places. My son takes me there. It's nice; we talk about the past and what's going on in the village".

"The house is actually too big for me now. It used to be a nice house when we were a family. But now that I am on my own, I don't need all this space. It's actually a burden sometimes; I have to keep it all clean. And being on your own in such a big house makes you feel lonely sometimes. Luckily, I have my son nearby, and when he comes, he always drinks coffee with me."

"Here in the village, the welfare organisation organises activities in the community centre. Volunteers from the village come and pick me up from my house and bring me there and also take me back. On Tuesdays it's playing cards, and on Fridays it's gymnastics for older people like myself. Of course, it's good for your mind and body to do these things, but actually, I enjoy most the social aspect of being with others and having a talk about things. And the people who organise the activities are very nice and keep an eye on you. I like going there; it makes you feel as if you still matter and belong to the community."

B) Name and age: Mrs. de Vries, 87 y/o

Living situation: She lives in a local residential care facility in a small rural village. She has a room for herself with a bed and a separate bathroom. There are a lot of photos from her family in the room.

Family situation: Mrs. De Vries is widow; she has two daughters, one living nearby and one living far away. She also has grandchildren.

"My husband passed away eight years ago. My daughters do visit me from time to time with the grandchildren, but they have busy lives themselves and can't come every day. The people I have the most contact with are those who also live here in the facility. We drink coffee every day downstairs, and two times a week, they organise games that we play together. I like that; by doing that, you keep in touch with others."

"When my physical condition deteriorated, I had to look for a smaller place with care nearby. But for me, coming live here in the care centre was also a way of being closer to other people. In my last house, due to the distances, I couldn't go out anymore to see my neighbors or to go to the community centre. For me, it is impossible to live with my family; they have their own lives. But here in the care centre, I am still among others."

"You can drink coffee together, or they bring coffee to your room so you can drink it alone. When I can, I drink my coffee with others. Sometimes I am too tired, and then they bring my coffee. The people who work here are very nice. They make time for small talk, and they respect your privacy. I don't go out to see others anymore. But that's okay; at my age you can't expect that much anymore. You have be grateful that they take such good care of you. And there's always the telephone to talk to my daughters and grandchildren."

Figure 2. Two personas representing the stories about social frailty from **A)** a participant who is community dwelling (Mrs. Jansen) and **B)** a participant living in the residential care facility (Mrs. De Vries), based on the interviews.

1. Resources and activities that are (still) present to fulfil social needs

Our participants spoke about several resources and activities they have in relation to their social needs fulfilment. Relationships with spouses, children and/or grandchildren were discussed by several participants in relation to the need for affection, i.e., to love and to be loved regardless of one's assets or actions. For example, Mrs. P. expressed her feelings over her relationship with her (grand)children and told about the importance of their visits (quote 1). Other participants expressed what their relationships with their spouses, children and/or grandchildren mean to them. We observed a hierarchy in the relative importance of the different resources for fulfilling the need for affection, i.e., spouses were mentioned often as being very important, then children and grandchildren, followed by others, such as friends or neighbours. The social resource that was most important for our participants was family (spouses, (grand)children, siblings). For example, Mrs. F. told us that she thinks spending time with her siblings is important because of their relationship with her youth and the place and family she originates from (quote 2).

In addition to family members, other social resources that were mentioned by participants were friends, neighbours, and pets. Contact with neighbours was regarded as important by not only among community-dwelling older adults but also by those in assisted living. Mrs. I. explained about the relationship she experiences with her neighbours (quote 4). This quote illustrates the importance that participants attribute to having contact with neighbours. However, in this quote, the participant also seems to refer to the intensity of this contact, i.e., contact with neighbours is important, but not at every instant. Mrs. W., who is an assisted-living respondent, told about the people she has most contact with, who are her neighbours (quote 5). For her, these neighbours have become the people she has most contact with since she does not see her family that often anymore.

Their past working lives were discussed by our participants as a significant source of fulfilling the need for status, for instance, to distinguish themselves from other people. One of our participants had retired from his position as the principal of a school two years before he was interviewed. He told us how he still feels as though he is a key figure in the community, as he knows everyone in the community, and people still consult him (quote 3). Mr. H.'s story illustrates how the experience of status in the past, such as that of a principal, can continue after retirement. Although most other participants who had been engaged in (paid) employment did not have as prominent roles in the community, they discussed their need for the fulfilment of status in similar ways. Having had particular employment during one's working life seems to contribute to a sense of status that is still enjoyed well into retirement. We did observe that the fulfilment of status declined with advancing age; for participants who had been retired longer, their status derived from employment seemed

to play an increasingly smaller role. Similar to stories about employment, other specific talents and assets were also discussed as ways to distinguish oneself from others and as a source of status, such as sports achievements from the past or the profession of one's children. However, employment was discussed most prominently, probably because a significant part of one's life is spent working.

Our participants also discussed the social activities they undertake with others; undertaking activities with other people can contribute to the fulfilment of social needs. An activity that was mentioned often was spending time with family, friends or neighbours (for example, family visits, visits of friends or acquaintances, or drinking coffee with neighbours). Mrs. K. explained about the routine she has with two friends with the purpose of spending time together in a pleasant way (quote 6). This quote illustrates with what kind of activities people seek to fulfil their social needs, in this case drinking tea together to fulfil the need for affection or behavioural confirmation. Many of our participants told about visits to or from others with the purpose of spending and enjoying time together and/or belonging to a group.

Participating in organised social activities, for example, playing games (cards or other local games) or doing gymnastics, was another activity that was mentioned in both groups. Often, participating in such activities fulfils the need for behavioural confirmation. A married couple, Mr. and Mrs. De J., who are assisted-living respondents, discussed the activities they participate in every week (quote 7). These kinds of activities (games, gymnastics) are generally well visited. The organisation of these activities by welfare organisations is mostly aimed specifically at older adults, and they are organised both for community-dwelling residents and those who are assisted-living residents. In addition to these activities, participants also reported being member of a club or social association (for example, of a sports club, a neighbourhood association or a needlework club).

Mobility is mentioned often among our participants within the realm of being able to fulfil their social needs, e.g., being able to drive a car, using a taxi, being able to ride a bicycle, or the use of walking aids. Mrs. L. spoke about how she depends on her car for her activities and social contacts since her husband passed away; previously, she never drove because her husband used to drive (quote 8). This quote illustrates the importance of mobility for being able to participate in (social) activities. When people are no longer mobile, they rely on others, such as family, neighbours, volunteers, or a taxi, to take them somewhere. Although a small shop is present in some villages, different community-dwelling older adults mentioned that they depend on driving the car for going to the supermarket in a larger town in the area. Going to the supermarket, then, is discussed as a social activity,

i.e., by either shopping together or being amongst other people. However, for several social activities, for example, going to the theatre, the individuals need to go to a larger town, for which they depend on driving a car.

Participants also frequently showed photos of family of pets in their living rooms, sometimes referring to them as lost loved ones when talking about them. One of our participants showed a photo when she spoke about a sister who had passed away. People use photos to recall memories or emotions that are related to social resources such as, in this case, family. Although the photos are not social resources themselves, they do play a role in the connection with loved ones, both those still present and those who have been lost. The photos were more often mentioned or observed in interviews with participants who live in the assisted-living facility. One explanation might be that they have lost more social resources than community-dwelling individuals and thus use the photos to keep their memories alive.

We also found that some older adults still experienced feelings related to past events when talking about previous social contacts. For example, Mrs. C. told us a story from the past that is still often talked and laughed about with others (quote 9). This quote illustrates how people build up mutual stories. Shared experiences might function as a reinforcement of the tie that people have with each other. Although this was a very explicit example of such stories, none of the other participants mentioned this example.

Differences between groups

A difference we found in the resources and activities that are present in the assisted-living participants compared to the community-dwelling participants relates to a number of social activities that were only discussed by community-dwelling older adults; i.e., going out with others (for example, family or friends) for shopping or to go to the theatre, or going for a short trip (by bike or car) or on vacation, or volunteering or helping out other people. Mrs. D., for example, spoke about how she goes out with friends to the theatre and the opera. She does this several times a year, and for her, these are important social activities (quote 10). Among assisted-living older adults, we found that they usually participate only in activities within the facility, such as playing cards or gymnastics.

2. Lost resources and activities

The experienced loss of spouses was the most prominent finding in relation to the losses of resources and activities in social needs fulfilment. For example, Mrs. T. spoke about her feelings after the loss of her spouse (quote 11). The absence of spouses, and sometimes that of children, was mentioned in both groups of participants. Friends who had

passed away and/or no longer had much contact with neighbours were also discussed as experienced losses in contacts that relate to social needs fulfilment.

Additionally, the situation that arises when family lives far away, thereby causing less contact than both desired and needed, was discussed. One of the participants, Mrs. F., explained that she thinks the greater geographical distance between families has to do with the changing society (quote 12). This participant referred to the fact that in the current society, due to an increase in mobility, family members live at greater distances from each other. This might hinder (frequent) contact because meeting each other takes more time and effort than when people live closer together. Using the telephone was mentioned as an alternative to face-to-face contact to keep in touch with those living far way.

The participants also mentioned limitations that occurred in their social resources and activities due to other problems. Issues raised in this respect were health problems (e.g., visual problems and deafness), health problems of the spouse, loss of mobility (not being able to drive a car, not being able to ride a bicycle due to physical problems), or an insufficient financial situation. Limitations in these resources have resulted in limitations in social resources or activities for several participants and therefore have an indirect conditional role in social needs fulfilment. Mrs. N., for example, related that she is struggling with health problems, which restricts her in participating in social activities (quote 13). Limitations in activities were found among both community-dwelling and assisted-living older adults. For example, participants mentioned that they cannot go on vacation anymore, cannot attend coffee visits anymore, or cannot participate in organised activities anymore. Mrs. T. spoke about going to the theatre, which she used to do with her husband (quote 14). This quote illustrates that participating in social activities has a close relation with the abilities of others; in this case, the spouse is no longer able to go to the theatre. This has a direct impact on the participant herself, who has thus lost several social activities due to the limitations of her spouse. Therefore, in this case, the social frailty of this participant is related to the social frailty of her spouse.

Differences between groups

An experience that was mentioned several times by different participants was loneliness. Mrs. J., for example, expressed her feelings of being alone after the passing away of her spouse (quote 15). Remarkably, loneliness was mentioned several times by the community-dwelling group but not by the assisted-living group. It could be that assisted-living older adults experience less loneliness because they benefit from the fact that they live together, i.e., there are more resources and/or activities available in the assisted-living setting for fulfilling their social needs.

Another difference we noticed between the community-dwelling respondents and the assisted-living respondents was found in the issue of mobility; the ability to ride a bicycle and to drive a car (for going out) were mentioned among the community-dwelling group, while in the assisted-living group, only the loss of these resources was mentioned. Mrs. F. discussed that she does not participate in a bicycle club anymore since she is too scared to ride a bike (quote 16). This quote illustrates how the loss of mobility has the consequence of not being able to participate in a club, which has a social function. Mobility, in that way, is reported as an indirect condition for social activities.

3. Self-management abilities directed at social needs fulfilment

Abilities to manage and adapt to the changes in resources and activities (in relation to their social needs fulfilment) that were mentioned in both groups were staying active in the community, being positive about life and being in control of one's life. Additionally, participants intentionally started using other resources when they lost a resource. For example, after the passing away of their spouse, some respondents took in a dog to have company, started to go to organised social activities in the community to have company, or went to an assisted-living facility to live closer to others. Mrs. H. clarified her choice of taking in a dog as a specific strategy after the passing away of her spouse (quote 17). Although the companionship of animals usually does not compensate fully for human contact, this quote illustrates how participants use strategies to compensate for a lost resource to be able to fulfil one or more social needs.

Differences between groups

Participants also reported negatively about their self-management abilities, for example, about their ability to participate in activities, their fear of illness and their fear of living alone. These findings were only found among assisted-living older adults. An example of a negative orientation towards one's own abilities is given by Mrs. P., who reported very negatively about the activities she is still able to do (quote 18). Although she talked about several social activities she still participates in, she reports she cannot do anything anymore in her daily life. This negative orientation might prevent her from initiating other activities. Another participant, Mrs. G., spoke about her negative feelings regarding contact with others (quote 19). This quote illustrates that this participant felt that she was gossiped about. She used this situation as an illustration of not feeling completely part of the group of older adults living in the care centre, which makes it more difficult for her to participate in social activities with these other people.

Table 2. Quotes from community-dwelling and assisted-living older adults illustrating their experiences concerning their social frailty (I=Interviewer, CD=Community-Dwelling, AL=Assisted-Living) *Quotes that illustrate differences between AL and CD groups

	Community dwelling	Assisted living
Resources and activities that are present	**(2)** *I: Can you tell me with whom you have the most contact with during daily life? Who do you think are very important?* *Mrs. F.: […] My, ehm, our brothers and sisters-in-law. […] Yes, they are just very important because, they have a connection with your youth and where you are from and ehm, well, yes, they're just part of you.* [Female, 67 y/o, CD, married with children] **(3)** *Mr. H: I have got to know the whole community of [village name]. That has to do with one's position. The head of the school is asked frequently* [for advice or to participate in community activities]*, you know. In this position, one used to be one of the notables of the community.* [Male, 67 y/o, CD, married with children] **(4)** *Mrs. I.: A good relationship with my neighbours, that's what I think. Here, I don't want to be a loner in the building. So, well, a good relationship with the neighbours. But I don't want them to come by every instant.* [Female, 74 y/o, CD, married with children] **(6)** *I: Ok. Ehm, and do you have, well, routines or things that you do every week? Mrs. K.: No. I have, ehm, every fourteen days, I come together with two other ladies in turns at each other's places. We have done that, I think, for over twenty years.*[…] *I: And what do you do then? Mrs. K: Oh, nothing special, we just drink tea together and have a good time.* [Female, 95 y/o, CD, widow with children]	**(1)** *Mrs. P: Yes, children, yes, it is, ehm, very important for me that they come on a regular basis and that I can get along with them, with all of them.* *I: Ok. Mrs. P: I think am the sweetest grandmother [chuckles], that's what they also say themselves, the grandchildren.* [Female, 85 y/o, AL, widow with children]. **(5)** *I: Ok and can you tell me whom you have contact with on a regular basis? So actually, the most contact with? Mrs. W.: [Silence] Well, the one next door, you must have been there. I: Ehm. Mrs. W.: [name of neighbour]. I: That could be, yes. Mrs. W.: Yes, and Ms. K. who lives behind me and [name of neighbour] and [name of neighbour].* […] *I: Ok, so mostly people from this building? But next to your neighbours, do you have other people whom you see regularly, like, for example, your daughter? I: Well… Mrs. W.: Some acquaintances from the past I still see.* [Female, 82 y/o, AL, married with children] **(7)*** *Mr. de J.: We go to the organised games. I: Ok, you go there as well? Mrs. De J.: Fridays, I play Shuffle [local game], and he plays cards. Mr. de J.: We play Jass [local card game], that's always on Fridays. I: Ok, and what's the reason for going? Is that for social contacts? Or? Mr. de J.: No, you just like to do it, hey. Play cards […] Mrs. De J.: Nah. That's a way to be among people, right. Before we came here, we used to go to the community centre.* [Married couple; Male, 82 y/o, and his wife, AL; they have children]

Table 2. Quotes from community-dwelling and assisted-living older adults illustrating their experiences concerning their social frailty (I=Interviewer, CD=Community-Dwelling, AL=Assisted-Living) *Quotes that illustrate differences between AL and CD groups (continued)

	Community dwelling	Assisted living
	(8) *Mrs. L.: Well, I never drove the car but now I have to, because otherwise I can't get anywhere. I: Do you use it a lot, your car? Mrs. L.: No, not much. I: Ok. Mrs. L.: Saturdays I go to [city name] sometimes, to buy some fish for my neighbour across the street, and I will go and eat it with her.* [Female, 74 y/o, CD, widow] **(9)** *[Mrs. C. is telling a story about the past] Mrs. C.: And then they came with the two of them to that other woman. Well, that was it. Her son also played games with them. Well, she said, we have laughed a lot. But then my aunt came to live here in [village name]. […] Then the mother-in-law slept with the son and daughter-in-law. Well, we still talk about that. I: Ok. Mrs. C.: We have laughed a lot.* [Female, 74 y/o, CD, married with children] **(10)*** *I: And are there more of these kinds of activities that you enjoy most or that you don't set aside for other things? Mrs. D: Well, yes, that is another activity. We go out with friends several times to the theatre. I: Ok. Mrs. D: And ehm, we ladies go the opera, because our spouses don't like that. Well, we go together then.* [Female, 68 y/o, CD, married with children]	
Resources and activities that have been lost	**(11)** *Mrs. T.: I miss my husband tremendously. I: Ok. Mrs. T.: Very much. I: And, have you have that, let's say, because that is now four years ago. Mrs. T.: Yes. I: Have you had that feeling since the beginning? Mrs. T.: Yes, always. I: Ok. Mrs. T.: I can't help it [gets emotional].* [Female, 85 y/o, CD, widow with children]	**(13)** *I: And do you, for example, also go out drinking coffee with others here in the [name of the residential care facility] or to other organised activities? Mrs. N.: No, I have tried it, but it became too difficult for me, walking all the way there, and also with gymnastics we had to catch balls, but I couldn't raise this arm. Then I tried it with the other arm, but that didn't work either.* [Female, 93 y/o, AL, widow with children]

Table 2. Quotes from community-dwelling and assisted-living older adults illustrating their experiences concerning their social frailty (I=Interviewer, CD=Community-Dwelling, AL=Assisted-Living) *Quotes that illustrate differences between AL and CD groups (continued)

	Community dwelling	Assisted living
	(12) *Mrs. F.: I would like more contact, but that could only be possible, in my case, in a different constitution of society. More like it was in the past. When people lived closer together, were more involved with each other, and, ehm, yes, therefore remained more a unity, as a family.* [Female, 68 y/o, CD,] **(14)** *Mrs. T.: We used to go, we had a subscription for the* [name of theatre]; *we used to go, when we lived there, 5 or 6 times per year to a show. My husband can't do that anymore. So, we have a lot of things we can't do anymore.* [Female, 73 y/o, CD, married with children] ***(15)**** *Mrs. J.: Terrible. So yes, now I am here lonely and alone. I do have some acquaintances around here, but well, I am still on my own, and I think it's terrible.* (Female, 74 y/o, CD, widow with children].	**(16)*** *Mrs. F.: I did ride a bicycle back then because we used to be in a bicycle club, but now I don't do that anymore. I: Ok and can I ask why you don't ride a bike anymore? Is it not possible anymore? Or? Mrs. F.: No, I don't dare to ride a bike anymore. I: Ok. Mrs. F.: No, as long as… I had my bike here for some time, but I haven't used it anymore, so I don't dare to sit on it.* [Female, 85 y/o, AL, widow with children]
Self-management abilities	**(17)** *I: You said you bought him* [the dog] *after your husband passed away. Mrs. H.: Yes, immediately. I: That was intentional? Mrs. H.: Yes, a very intentional choice, […]and then I thought, 'Well, I don't want to leave my house, I don't want to leave my bed, I don't want anything anymore. That's not good, because I do still live, so if you want to go on, you have to take action.' And then I thought, 'Well, we always had dogs. […] I will call the shelter and say that I want to have a dog.'* [Female, 69 y/o, CD, widow, one child]	**(18)*** *I: Ehm, let's think. How important do you think is it to initiate activities or to do things? Mrs. P.: … Well, I would like to do more, but you can see for yourself that I can't do anything anymore* [Female, 89 y/o, AL, widow with children] **(19)*** *Mrs. G.: And, well, there they all sat down, all of them, or a lot of them, at a very long table, and I went there and sat down […] and then all of a sudden, one of those ladies said, 'Yesterday you were wearing such a blouse.' And I thought, 'Oh, it's like that here.'* [Female 76 y/o, AL, widow, one child]

Discussion

In this paper, we aimed to obtain a more in-depth understanding of the concept of social frailty and to explore whether there are differences in the social frailty experiences between community-dwelling and assisted-living older adults. We found that social frailty was discussed as a balance between resources and activities that are present and those that have been lost and that this balance is maintained (or not) by self-management abilities. Loneliness was only reported among the community-dwelling participants, while the loss of mobility and participation in (social) activities was reported more prominently among the assisted-living participants.

Social frailty as a balance

Regarding the experiences of the participants' social frailty, we found a great variety in the social and/or general resources, social behaviours and/or activities, and self-management abilities directed at social needs fulfilment. In this study, we observed that social frailty can be seen as a delicate balance of assets and deficits, which can be disrupted by age-related changes (for example, physical abilities or life events). This observation is in line with our concept of social frailty (Bunt *et al.* 2017), in which we defined social frailty as a continuum of being at risk of losing, or having lost, social and general resources, activities, or abilities that are important for fulfilling one or more basic social needs during the life span. It also conforms to the suggestion that the concept of frailty should move from a merely deficit-based approach, as it is often understood, towards a concept of frailty balance, i.e., recognising that frailty is a delicate balance between older adults' assets and deficits (De Donder *et al.* 2019). People try to gain or maintain resources and activities to maintain this balance. The self-management abilities that were identified in this study, and which our participants use to gain or maintain their resources, were staying active in the community, being positive about life and self-efficacy beliefs. Based on our data, it seems that older adults can also compensate for a loss or change in resources or activities by using these self-management abilities, for example, by using other resources. These abilities match those found in the literature, for example, the self-management ability as 'a positive frame of mind', which refers to the ability to adopt and maintain a positive frame of mind or positive expectations towards the future (Steverink *et al.* 2005). Additionally, respondents in the current study were able to use other resources when they lost one or more resources. This strategy can be identified as a substitution strategy (Steverink 2001, Steverink and Lindenberg 2006, Steverink 2014), and it serves to compensate for a loss to maintain the fulfilment of one's social needs. It has been shown that people who have better self-management abilities, such as the examples mentioned above, can make up for the loss of resources or activities and therefore become less socially frail (Steverink and Lindenberg 2008).

On the one hand, the findings demonstrate that there are similarities in the type of resources and abilities that are important to people regarding fulfilling their social needs (for example, family was a very common social resource among our participants). The findings also suggest that contact with those who live nearby, e.g., the neighbours, is important; nearly all the participants in our study referred to that notion. On the other hand, the variety in the quantity and quality of the resources and abilities mentioned by the different participants and the differences in which they are managed also show that social frailty comprises a very individual balance between assets and deficits and differs between older adults.

In addition to social frailty as an individual balance, we also observed that the social frailty of participants was related to the social frailty of others, specifically spouses. Others have found co-dependencies between spouses' physical frailty statuses (i.e., an individual's greater physical frailty predicted the spouse's greater physical frailty) (Monin *et al.* 2016). This relation between spouses' social frailties makes sense, since spouses who are caring for their (pre)frail spouses might experience negative consequences from this caregiving role. Beeson (2003) reports, for example, that caregivers are more prone to be lonely than are non-caregivers, while Clark and Bond (2000) report restrictions on the social participation of caregivers due to their caregiving role, and Verbakel (2014) finds that caregivers have lower levels of subjective well-being than non-caregivers.

The notion that having more contact with family has become more difficult because families are spread across the country marks a development on the societal level. One participant seemed to refer to changes in Northwest European cultural areas in that kin ties are loosening while non-kin ties are gaining importance in people's social network (Pichler and Wallace 2007). This might be, among other things, caused by increased geographic mobility in families. Van der Pers *et al.* (2015) find that the geographic proximity of children is positively associated with the well-being of older adults. Gazso and McDaniel (2015) point out the protective role families and wider social relations have in dealing with the uncertainties of life in late-modern societies.

Differences between community-dwelling and assisted-living participants

In this study, we noticed that loneliness in relation to social needs fulfilment was only mentioned by the community-dwelling participants and not by the group of assisted-living participants. Loneliness has been defined as a situation experienced by an individual in which there is an unpleasant or inadmissible lack of certain relationships (de Jong-Gierveld 1987, Jong-Gierveld *et al.* 2006). Two types of loneliness are distinguished: emotional loneliness (missing of a confidant) and social loneliness (missing a broader group of social contacts or an engaging social network) (Weiss 1973). Loneliness indeed seems related to

social needs fulfilment; Steverink *et al.* (2019) find that both emotional and social loneliness are related to deficits in social needs fulfilment, specifically to deficits in the need for affection. The finding that loneliness is only reported in community-dwelling older adults is not in line with studies that have reported that the prevalence of loneliness among assisted-living older adults is higher than that among community-dwelling older adults (Savikko *et al.* 2005, Tijhuis *et al.* 1999). Notwithstanding, it can be hypothesised that assisted-living older adults benefit from the fact that there are more resources and/or activities available for the fulfilment of their social needs in facilities where people live together. For example, Jang *et al.* (2014) find that social engagement within assisted-living facilities has a positive effect on well-being. Street and Burge (2012) even postulate that the benefit from opportunities for positive co-resident relationships in assisted-living facilities may be greater for general well-being than living independently in the community.

Another difference between our assisted-living participants and community-dwelling participants is their ability to go out and participate in (social) activities. Specifically, in these rural villages, community-dwelling participants rely on either their car or public transportation for certain activities, such as going shopping or going to the theatre. The assisted-living older adults report their losses related to riding a bike, such as being limited to a smaller physical area and having less opportunities to go out themselves. Glass and Balfour (2003) describe that older people become less mobile and that their effective neighbourhood shrinks over time to the areas close to their home. Meijering *et al.* (2019) find that the capability of older adults to be mobile is subject to decline and that this renders them more vulnerable. In that way, living in an assisted-living facility might be to the advantage of older adults because resources and activities are nearby. Ten Bruggencate *et al.* (2019) suggest that when the world of older individuals is getting smaller, social technology can play a role in fulfilling their social needs by bringing the world outside closer.

Specific for the rural environment is the fact that our participants have to go to a larger town in the area for several activities, such as going to the theatre or going shopping. The number of services that are offered in these kind of rural villages is relatively small. Stoeckel and Litwin (2015) describe the importance of neighbourhood accessibility to services as a measure for social inclusion for older adults; by utilising these services, older adults have the opportunity to meet people, such as neighbours or service personnel. The authors found that urban settings are more service accessible than their rural counterparts (which is also described by Cao *et al.* (2010) and Kerr *et al.* 2012)) and that neighbourhoods with lower levels of access to services have a negative effect on older adults' subjective well-being. Haak *et al.* (2008) find that older residents of urban neighbourhoods maintain higher activity levels than their rural counterparts, as demonstrated by their greater participation in activities outside of the home.

Implications for research and policy

The findings in this paper are grounded in the experiences of older adults in rural villages in the northeastern part of the Netherlands. Although in this paper we have not addressed the social frailty experiences of older adults living in urban settings, future research might contribute to understanding what the differences are between the social frailty experiences of older adults in rural areas and those in urban settings, specifically focusing on how these experiences are grounded in their living environment. Another point of interest for future research is the role that social technology can play in fulfilling older adults' social needs, specifically in rural areas where potentially older adults have higher chances of becoming socially frail.

Our findings put into question the notion that older adults benefit from policies that urge them to continue living in the community as they are and to rely primarily on their informal network. For older adults who have lost important social resources (for example, a spouse) or for those who have become less mobile (for example, due to physical limitations), living in assisted arrangements can also bring about new social resources and activities, which may serve to fulfil their social needs and prevent them from becoming (more) socially frail. This brings into question whether such policies, which urge older adults to remain living independently in the community, are indeed in favour of older adults' well-being. The closing of residential care facilities in the Netherlands in recent years might have reduced the number of important opportunities for the social needs fulfilment of (at least a part of) the older population. These facilities offered social resources and activities, which might have prevented older adults from becoming socially frail and thus have been in favour of both their social and overall well-being.

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