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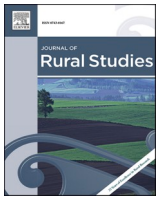

Opportunities, challenges, and future directions for the public social participation of older adults living in a rural region in Germany: Results from a mixed-methods study

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ABSTRACT

Social integration is considered beneficial for people's health. However, research shows mixed results for the older population and often lower social participation and related health-outcomes for rural areas, rendering rural-living seniors a potentially vulnerable group. This article explores current opportunities, challenges, and possible improvements for seniors' public social participation in the structurally weak and fast aging Uckermark county in northeastern Germany. With a mixed-methods approach, we geocoded public data on social clubs, conducted expert interviews, and applied a qualitative content analysis to gain insights into the structural conditions and social mechanisms of seniors' social participation in the Uckermark. Geocoding revealed that over 60% of the settlements have at least one social club and experts deemed the number of social activity offers sufficient. However, they reported challenges relating to declining physical health, poverty, infrastructural deficits, difficulties in outreach, a lack of motivation, conflicting relationships, regional mentality, and a struggle for sustainability. They suggested prioritizing rural seniors' lives in the political agenda, increased networking and sustainable reorganization of regional stakeholders, and providing tailored participation offers. The interviews highlight the interconnectedness of different groups and historically shaped socioeconomic developments in the rural community. Relating these results to international studies and aging theories, we conclude that there are common structural challenges in rural regions that foster seniors' social disengagement. However, dynamic and regionally specific relationships, norms, and preferences seem to play a major role in seniors' selective (dis-)engagement in public social activities and deserve greater attention in the provision and evaluation of participation offers.

1. Introduction

Social integration is considered beneficial for people's health across all ages. For the older population of people over 65 years, many studies suggest that higher social integration is connected to reduced rates of depression and improved cognitive abilities (Schwarzbach et al., 2013; Kelly et al., 2017; Lee et al., 2018; Santini et al., 2020; Sun and Lyu, 2020). Studies show effects in terms of actual participation as well as networks or social capital that provide seniors with resources and opportunities for social engagement. According to systematic and scoping reviews, however, some studies also show no or even negative associations between older adults' social integration and health outcomes such as cognitive function, wellbeing, loneliness, and mortality (Coll-Planas et al., 2017; Kelly et al., 2017; Ibrahim et al., 2022).

There are several possible explanations for these mixed results. Berkman and colleagues (2000) have proposed a model describing the relation between social integration and health from the macro to the physiological level, with vertical effects between them. Depending on the analytical level, research might therefore show different effects of social integration on older people's health. Additionally, a variety of possible social determinants might influence the effects of social integration operating at the different levels. For example, research shows

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that gender, socioeconomic status, and ethnicity influence seniors' social engagement and related health outcomes (Ziersch et al., 2009; Wiest et al., 2015; Perez et al., 2022). The same applies to regional and cultural differences and the ways older people experience aging and social participation (Fung, 2013; Sun and Lyu, 2020).

The influence of regional characteristics can manifest in terms of the number of people available for social interaction and the required infrastructure, which differ significantly between rural and urban areas. Indeed, in terms of seniors' social participation forms and frequency, as well as associated health outcomes, international research shows differences between rural and urban areas. Vogelsang (2016) reports lower levels of older adults' social participation in rural compared to urban areas of Wisconsin, USA. The study also shows that potentially health-promoting activities such as meeting friends and group exercise were less popular in rural areas. Interestingly, some activities, such as religious and cultural participation, had a higher positive effect on self-rated health in rural areas. For China, Sun and Lyu (2020) show that rural seniors participated less frequently in social activities than those living in urban areas. However, social participation itself had higher benefits for the cognitive health of rural-living seniors. In contrast, Ziersch and colleagues (2009) report that rural Australian seniors engaged in larger networks and had better mental health than urban older adults, and that social capital only had positive effects on physical health for urban seniors. These studies suggest that rural and urban seniors do not only engage differently in social participation, but that social participation itself affects them differently (Ziersch et al., 2009; Vogelsang, 2016). Research on seniors' social participation and the potentially related health effects should therefore pay special attention to regional characteristics.

While studying regional differences, researchers have argued for conceptualizing 'rurality as a continuum' and acknowledging rural regions' structural and cultural heterogeneity instead of focusing on a rural-urban dichotomy (Slama, 2004; Skinner and Winterton, 2018). Drawing on data from the 2008 German Aging survey, Wiest and colleagues (2015) suggest a five-level typology of rural to urban regions in terms of socioeconomics and demographics. The lowest levels are 'structurally weak district regions' and 'aging pioneers' respectively. The former are defined by low population density and income, a high unemployment rate, and weak infrastructure, while the latter are marked by a shrinking and fast aging population. Similar to the abovementioned studies in Wisconsin and China, seniors living in structurally weak and ageing pioneer districts in Germany showed significantly smaller networks and lower levels of social participation, health, and subjective wellbeing than those living in other regional types such as peripheries, tourist, industrialized, or slow aging regions.

In sum, previous quantitative research shows mixed results when it comes to the patterns and health benefits of seniors' social integration. Seniors in rural regions, especially in structurally weak and rapidly aging areas, often – but not always – show lower levels of social integration and worse health outcomes. Therefore, it is important to study the social mechanisms and structural conditions in those areas that render rural seniors a potentially vulnerable population group when it comes to social participation and its effects on health outcomes.

In this study, we focused on a structurally weak and rapidly aging area in Germany to analyse the opportunities and challenges for older people's social participation. We conducted a mixed-methods study based on publicly available data on social clubs and expert interviews. We thereby provide a characterization of the structural conditions of rural-living older adults' social participation, as well as possible psychosocial and cultural dynamics that hinder and facilitate seniors' participation from an expert perspective. Relating the results to aging theories and observations made in different rural regions worldwide, this article aims to contribute to the comparative study of the dynamics of older adults' social participation in rural areas. We hope to offer explanations for similarities and differences between urban and rural areas, as well as within rural areas, in order to inform future research and the development of adequate policies for these regions.

2. Material and methods

We conducted a mixed-methods study in the Uckermark, Germany, combining analysis of publicly available data on social clubs to assess the geographical distribution of formal participation options, and expert interviews with people working in social participation activities for older adults to gain knowledge about challenges and solution strategies. The study received ethical approval from the MHB Ethics Committee in 2021 (E−01-20210426).

2.1. Geocoding of social clubs

We first surveyed all officially registered social clubs in the county provided by the websites of local authorities' offices, independent municipalities, and towns (status May 2021), where social participation for older adults is potentially possible. We used QGIS (Version 3.28.0 Firenze) with the plug-in MMQGIS based on the OpenStreetMap/Nominatim web service to geocode the identified social clubs. We then calculated the ratio of social clubs per settlement to people over 65 years and divided them into quantiles; we excluded settlements without any social clubs. Settlements were defined as inhabited areas below municipality level, as provided by the Federal Office of Cartography and Geodesy (Bundesamt für Kartografie und Geodäsie, 2022). We calculated the proportion of older inhabitants at the municipality level (status December 2021) and assumed this value for all settlements belonging to the municipality, as there is no data on the settlements' age structure, only inhabitant numbers (Bundesamt für Kartografie und Geodäsie, 2022). For the geocoding process, we identified and categorized different kinds of social clubs based on an open and axial coding process (Corbin and Strauss, 1990) according to their primary and secondary thematic foci.

2.2. Expert interviews

Following the geocoding of social clubs, we conducted an online search to identify further public institutions, such as nursing homes, which provide spaces and organize meetings and events for the older population in the county. We then identified and contacted possible interview partners working in the identified social clubs or institutions, based on maximum variation sampling. Our goal was to include experts from towns and rural municipalities, cover different geographic areas, and include volunteers and full-time representatives with different organizational affiliations from the identified social clubs or public institutions. Possible interview partners were contacted via email or phone.

A semi-structured interview guideline was developed based on literature on conducting expert interviews (Meuser and Nagel, 2009) and covered the following domains: overall description of the current social participation situation for older people in the particular town or municipality; existing and missing opportunities for participation; challenges; and solution strategies. Seven experts from three towns and three rural municipalities were interviewed. They consisted of representatives from a social association, three senior clubs, a senior's advisory board, a citizens' initiative, and a multi-generational house. Two interviewees were working in the same town and adjacent municipality and another two were active in the county's senior's advisory board. All but two interviewees (social worker, manager of a social association) were volunteers (board members, volunteer workers). The volunteers were in their early 60s–80s and thereby not only experts providing social participation opportunities for older people, but members of the target group itself.

After a lack of response from further potential interviewees and receiving recommendations for individuals we had already interviewed, the maximum number of potential interviewees who could be contacted

via phone or email was deemed to have been reached, and recruitment was closed. The telephone interviews took place in 2022, lasted between 20 and 90 min, were audio recorded, transcribed by a transcription office, and pseudonymized. Transcripts were analysed using a qualitative content analysis method (Kuckartz, 2012) with the software MAXQDA. Interview quotations were translated from German to English by the research team.

3. Theoretical concepts of social participation in old age

Several theoretical approaches provide explanations for seniors' social engagement patterns. As mentioned in the introduction, Berkman and colleagues (2000) describe the connection between different forms of social integration and health via influences from the structural, psychosocial, and physiological levels. At the structural level, culture, economics, and politics shape the networks through which individuals and groups gain access to resources and social relationships. At the psychosocial level, social participation or engagement describes interactions between individuals and groups that "define and reinforce meaningful social roles […], which in turn, provides a sense of value, belonging, and attachment […] and opportunities for companionship and sociability" (Berkman et al., 2000, p. 849). Social relationships also influence health behaviour. Physiologically, social integration impacts stress responses, and thus immune or cardiovascular system functions, as well as disease transmission.

Social participation can take place in different forms of private and public social interaction. Vogel and colleagues (2017) distinguish 'social participation' (engagement in social networks, i.e. family, work) from 'cultural participation' (engagement in public social activities) and 'political participation' (engagement and responsibility in the political shaping of society). From another perspective, Levasseur and colleagues (2010) conceptualize social participation on a continuum in terms of the level and goal of engagement with others – including social connections without a specific goal, informal social participation directed towards a shared goal, and volunteering as providing informal support for others. While dimensions of social participation are often less clearly distinguishable in everyday life, these conceptual delineations sharpen our analytical understanding and enable a more precise examination of the connection between social integration and health (Douglas et al., 2017).

The data selected for this study, through the geocoding of social clubs and discussions of infrastructure and networks with interviewees, allow us to analyse social participation at the structural level. The interviews provide further information on the psychosocial level of social participation patterns as observed by the experts. Their observations mainly concern social and cultural participation, as well as public social interaction with specific goals and in the form of volunteering.

Past discussions of older people's social participation have been characterized by a debate between three main theoretical approaches. According to Cumming and Henry's (1961) 'disengagement theory', old age naturally comes with a withdrawal from social relationships and interaction, and a disengagement from social roles. This approach falsely assumes disengagement as universal and limited to old age, and neglects sociocultural and economic forces of disengagement such as social norms or financial limitations, as critics have argued (Hochschild, 1975). A more nuanced explanation was provided by Carstensen et al., 1999 'socioemotional selectivity theory', according to which older people might deliberately choose to disengage from social relations and interactions and focus on those they deem most in alignment with their current life situation and values. In opposition to disengagement theory, Havighurst's (1961) 'activity theory' argues that the need for social activity continues in old age, though its meaning and form may change, and that activity is a central element of successful aging. However, the approach and its successions have been criticized for promoting neoliberal ideas of productivity in order to reduce burdens for welfare and health systems, and for neglecting the socioeconomic conditions required to engage in active aging (Rubinstein and Medeiros, 2014). In the third approach, Atchley's (1989) 'continuity theory' takes a life-course perspective to argue that 'normal aging' involves older people continuing their social activity patterns drawing on coping mechanisms developed over their lifetime. Critique of this theory addresses the idea of normality in aging, the focus on individuals rather than socioeconomic structures and cultures (Guedes and Melo, 2019), and stress the experience of innovation in old age (Nimrod and Kleiber, 2007). Different aspects of all these theoretical approaches can be found in our data and in empirical records of aging in various regions and cultures, as will be discussed in the following sections.

4. Results and discussion

4.1. The Uckermark

Most of the structurally weak and fast aging regions in Germany are located in the former GDR (German Democratic Republic, 1949–90) (Wiest et al., 2015; Bundesministerium des Inneren für Bau und Heimat, 2020). The county of the Uckermark borders Poland and encompasses an area of 3077 km^2 (see Table 1). There is one medium-sized town with around 35,000 inhabitants (Schwedt/Oder) and four small towns with around 3000 (Lychen) and 13–20,000 inhabitants (Angermünde, Templin, Prenzlau), as well as seven districts with 21 municipalities. The region is located about 100 km north-east of the metropolitan region of Berlin and has been critically discussed as a place of rural gentrification caused by young, high-income Berlin re-locaters, leading to conflicts between new and old Uckermark inhabitants (Lange and Üblacker, 2023). When it comes to community life in rural regions such as the Uckermark, local clubs and associations act as important providers of social services and activities (Schubert, 2018) and have a long history of shaping collective identity in Germany (Fiedler, 2018). As a consequence of the socialist history of the GDR, religion plays a rather limited role in the Uckermark. According to the 2022 census, only 1% identify as Catholic and 9% as Protestant (no data on Muslim or other confessions; Statistisches Bundesamt, 2024).

4.2. Structural conditions for seniors' formal social participation: social clubs and activity offers

We identified 594 social clubs in the Uckermark, which we assigned to fourteen different types (see Fig. 1): sports (210), village and local heritage (84), arts, music, and culture (69), education and politics (33), gardening, nature conservation, and animal welfare (29), social welfare (24), volunteer fire brigades (23), monument preservation (20), agriculture and animal breeding (19), seniors (14), health (13), women (9), tourism (9), and other (38). Most of the seniors' clubs are located in the largest town (Schwedt/Oder). Sports clubs and clubs for education and

Table 1
Demographics and infrastructure of Uckermark county compared to Germany in the year 2021 (Bertelsmann Stiftung, 2024).

	Uckermark county	Germany
Inhabitants	117,336	83,237,124
Residents per km^2	40	233
Population trend since 2011 (%)	−5.2	3.6
Median age in years	49.7	44.4
Aged 65–79 years (%)	19.6	14.8
Aged 80 years and older (%)	9.8	7.3
Immigrants 65 years and older (%)	0.7	5.9
Old-age dependency ratio	54.1	37.3
Unemployment rate (%)	12.5	7.3
Old-age poverty (%)	1.3	3.2
GDP per capita in EUR	35,921	43,292
Basic supply proximity in metres		
Supermarket	2220	989
General practitioner	2452	962
Pharmacy	3284	1290

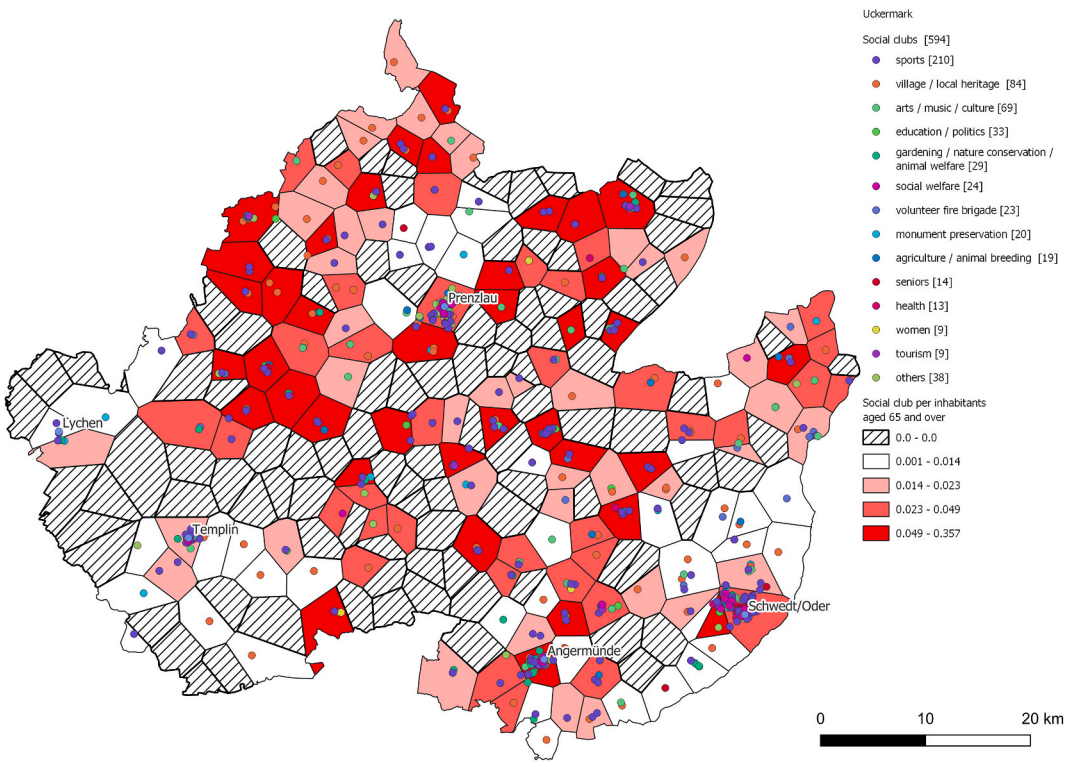

Fig. 1. Social clubs in the Uckermark.

politics, women, health, and social welfare, as well as other clubs, mostly accumulate in larger towns (Schwedt/Oder, Prenzlau, Templin, Angermünde), whereas village and local heritage clubs and voluntary fire brigades are mostly located in villages. Clubs for monument preservation and tourism are spread across the county. Clubs for art, music and culture, agriculture and animal breeding, gardening, nature conservation, and animal welfare are located in both larger towns and villages.

Fig. 1 shows the number of inhabitants, who are at least 65 years old, per social club in the settlements. The ratio of social clubs to the elderly, in settlements with at least one social club, varies between 0.02 and 0.357; the median is 0.023. Of the 255 settlements, 99 (38.8%) are without any social clubs; 35,894 citizens of all age groups live in these settlements (67–1646 citizens per settlement). These 99 settlements without social clubs lack formal social participation opportunities in their immediate environment. Assuming that locations within settlements can be reached by foot, there are options for public social participation largely independent of the public transport infrastructure or car use in over 60 percent of settlements in the Uckermark.

In the interviews, experts described older people's current opportunities for social participation as generally adequate, although not always well adopted and at risk due to several challenges. Towns were said to have a wide variety of social opportunities for older people, even more than for other social groups like adolescents or refugees. Rural areas were said to have a good basis for improvement, but facing future challenges. This evaluation aligns with the geographic distribution of social clubs.

Different public actors – churches, local fire brigades, charities, volunteers – provide opportunities for social participation as well as the necessary locations. Social clubs are financed by membership fees, public funding, and donations. Activity offers described by experts range from sports (hiking, bicycling, dancing), arts (painting classes, choirs), entertainment (celebrations, game clubs), education (readings, information events), excursions or travel groups, to regular meetings with no specific goal. Their descriptions mostly align with the classification we derived from the list of social clubs. However, interviewees did not address social participation opportunities that are provided by social clubs focusing on agriculture and animal breeding, gardening and nature conservation, health, or tourism. The map shows a relatively low ratio of social clubs in the western part of the county (around the towns Lychen and Templin), though this was not affirmed by our interviewees from this area. Experts also noted that social participation takes place in semi-public or private groups as well. Additionally, public places like the local bakery and weekly market provide opportunities for social engagement.

4.3. *Barriers for seniors' social participation*

According to previous research, barriers to older people's social participation in rural regions are related to personal, social, historical, cultural, and environmental factors (Marsh et al., 2018; Levasseur et al., 2020; Onishi et al., 2023). Despite stating that both remote areas and towns currently provide a sufficient variety and number of social participation opportunities, our interviewees addressed several challenges for seniors in the Uckermark.

4.3.1. *Health problems*

Poor physical health was described as a fundamental barrier to social participation, as illness and reduced physical abilities not only prevent older people from joining activities, but long-awaited doctor's appointments also compete with social activities.

> You have to think, people over 80, they all have health problems. And then things like dementia and incontinence and everything you have to deal with in old age. (Volunteer seniors' club organizer, municipality 3)

This most prominent barrier at the individual level was stated by interviewees in our study as well as in previous research in other rural regions worldwide (Goll et al., 2015; Strobl et al., 2016; Carver et al., 2018; Marsh et al., 2018; Huxhold and Fiori, 2019; Fischl et al., 2020; Levasseur et al., 2020). Poor physical health is a major driver of social disengagement in old age, though its effects could be mitigated by social

support networks and enabling infrastructure (Levasseur et al., 2015).

4.3.2. Poverty

Our interviewees explained that a work history in agriculture usually does not provide rural seniors with high pensions and thus limits their resources and ability to afford membership fees or public transportation to social events. Additionally, widowed older women were considered a group especially vulnerable to poverty, because many had not engaged in paid labour but in household and childcare work throughout their lives, resulting in a 'gender pension gap' (Statistisches Bundesamt, 2023). A similar problem was identified for rural-living older women in Sri Lanka (Marsh et al., 2018). In Germany in 2021, 20.9% of women and 17.5% of men over 65 years were at risk of poverty, defined as earning 60% or less than the national median income (Statistisches Bundesamt, 2023). A nationwide representative survey showed even higher rates for people over 80 years (22.4%), with lower rates and a smaller gender gap in eastern Germany (Fey and Wagner, 2023), where women were historically more likely to work in paid jobs due to the GDR's sociopolitical agenda.

While only 1.3% of people over 65 years living in the Uckermark received basic income support in 2021 (Bertelsmann Stiftung, 2024), our interviewees shared their experience that many do not apply for support due to a lack of information or struggles with social expectations and self-identity. They explained that older people often do not know their right to claim financial support or choose not to do so due to feelings of shame, pride, or fear of stigmatization (cf. Schoneville, 2020):

> The situation is the same for most people, the older ones, 80, 85, who think they have to beg. When I point this out to them, I say: "People, listen, you're entitled to this, it's not begging". Whether it's housing benefit or other things, you […] give them a calculation example. And then some of them are so taken aback and say: "Oh, I didn't know I could apply for that". (Volunteer seniors' board member, town & municipality 6)

4.3.3. Lack of infrastructure

According to our interviewees, limited public transport options prevent older people from joining social activities and reaching public services in general. Using taxis was not considered affordable, and taxi providers often do not serve rural regions for economic reasons. Recent policies such as reduced-cost public transport tickets – a measure implemented in Germany in summer 2022 to alleviate commuters' financial burden – do not benefit the rural population as long as the public transport network itself is not expanded, interviewees criticized.

> Basically, it's mainly members who can still drive themselves. […] During school days, it still looks reasonable, because the buses go to [town 5] and leave [town 5] again. But during the vacation season, some villages are pretty much cut off from local public transport. (Volunteer seniors' club organizer, town & municipality 5)

Interviewees added that many community centres had closed due to lack of funding. The loss of grocery stores, schools, and age-friendly housing was said to cause community members to move away from the countryside and further reduce the number of initiators and places for social participation.

> There was a small bakery in town, […] where many older people used to meet, and now they have almost nothing. To go out for coffee or breakfast in the morning or something like that. (Volunteer seniors' board member, town & municipality 6)

A scoping review by Carver and colleagues (2018) for rural communities across several countries named infrastructural deficits as a common barrier and highlighted the importance of transportation for older people's participation. This was also shown through interviews and focus groups conducted with rural stakeholders and older residents in New Zealand (Neville et al., 2018), Canada (Levasseur et al., 2020), Northern Ireland (Hagan, 2020), and Germany (Strobl et al., 2016).

4.3.4. Problems of identification and outreach

According to our interviewees, reaching older people in rural areas can be difficult. Due to older people's relatively low usage of digital technology such as email, communication about activities mostly takes place via leaflets, newspaper advertisements, and word-of-mouth. However, addresses cannot be obtained from citizen offices due to data protection laws, which makes it especially difficult to identify and reach isolated seniors. If addresses are known, some volunteers take the time and cost-intensive measure to go to older people's homes in their community to inform them directly.

> It really only happens through word-of-mouth. So that acquaintances are brought along. I had also agreed with the personnel office in the town administration […] that when someone retires, the flyer would be handed out. But there is little response, there is really little response. […] Those who are particularly active come on their own. […] But the ones you have to pick up, well, that's difficult. (Volunteer seniors' club organizer, town 1)

> A lot of […] them come late and, "I didn't know there was such […] an event". […] Not everyone has a newspaper anymore, and […] hardly anyone has internet, and you must, how shall I say, step on their toes a bit. […] And in the multigenerational house, there are notices, but well, not everyone always looks at it. (Volunteer seniors' board member, town & municipality 6)

This aligns with insights from rural Canada (Levasseur et al., 2020) and Australia (Winterton and Hulme Chambers, 2017), where social workers reported problems identifying older people in the community and the need for face-to-face communication to build trust with potential participants. This latter aspect could be especially relevant for older populations in general, as might be assumed from studies on seniors' communication preferences with family and care providers (Walsh and Callan, 2011; Yuan et al., 2016).

4.3.5. Lack of motivation

Poor response to activity offers was also explained by a lack of willingness to get involved or a phlegmatic attitude. In combination with infrastructural barriers and limited direct communication, older people's motivation appears low and participation seen as not worth the effort. The COVID-19 pandemic was said to have reduced people's motivation even further, as they got used to staying at home and 'unlearned' how to engage in social activities.

> This year, despite publicity, newspaper articles and I don't know what, and notices in all pharmacies, social institutions, I managed to get only two registrations, which were received on the day of the actual start date. […] So it's also sometimes like that, people like to complain that there's nothing going on. And during Corona there really was nothing going on. But when there is an offer, people are also phlegmatic. (Social worker, multi-generational house, town 6)

> It's not that people don't want to do it, it's just that they've forgotten how to do it in the last two years. […] So there is really a loss of energy. (Manager, social association, town & municipality 2)

Our interviewees also noted that a lack of motivation might indicate that there is simply no need for the activity. Additionally, as physical health was said to be considered a private matter, seniors seem reluctant to engage in public sports despite the large number of sports clubs. Furthermore, instead of joining a social club, 'younger old people' (60–75 years) seem more interested in participating in semi-public or private group activities. This was explained by their exposure to a more individualist lifestyle, especially after German Reunification in 1990, where club culture is seen more as a liability.

> I think it's down to the socialization of older people. So all those who are, let's say, still influenced by the pre-Reunification era are very used to these club structures, to cohesion, to joint activities. Those who are a little younger are no longer used to it. So we have difficulties attracting the 60-75-year-olds to our house because they […] are much more hedonistic, much more individualistic, and don't look for the common group. (Social worker, multi-generational house, town 6)

The perception of social engagement – especially in formal organizations – as a burden was also described by rural seniors in Sweden (Fischl et al., 2020), and is in part connected to older people's declining physical health. However, as noted by our interviewees, a lack of feedback might occur due to a misalignment of the offered activities and individuals' needs and preferences. Following the continuity theory of aging, seniors in the Uckermark might prefer to engage in fewer or more private activities as they did before retirement. Similar to what our experts described as "a hedonistic lifestyle" and a subsequent preference for private, solitary, or small-scale activities among younger seniors, Naito and colleagues (2021) have argued that traditional practices of community engagement have changed due to individualistic influences in rural Japan. They conclude that public community engagement could even be considered as invading individuals' privacy. This especially applies to the perception of physical health-related activities in the Uckermark, as our interviewees explained. While the former GDR government tried to control health-related behaviour (Linek, 2016), after Reunification health practices such as doing sports or smoking were largely considered a private matter and state regulations were accepted only slowly (Altgeld, 2010). Fischl and colleagues (2020, p. 288) further argue that older people's refusal to take responsibility in a social organization could be seen as a "demonstration of agency and choice" to spend their time in a way that is meaningful to them, which supports the socio-emotional selectivity theory described in section 3. Based on research in rural Ireland, Shortall (2008) also warns against taking social participation as the norm and equating non-participation with social exclusion. On the other hand, Goll and colleagues' (2015) study with isolated seniors in London suggests that avoidance of social interactions and emphasizing solitude could be a coping mechanism to deal with the experience of loneliness. Similar coping mechanisms might also be relevant to the rural population. However, there was a normative aspect in some of our interviewees' complaints of seniors' lack of motivation, as they sometimes argued for the benefits of community life over individual preferences. Keeping in mind possible interpretations of individuality, agency, socialization, and coping mechanisms for loneliness, the evaluation of needs and motivations should be balanced with the perspective of older adults themselves.

4.3.6. *Conflicting rural relationships*

As our interviewees described, there also seem to be inhibitions based on group dynamics or conflicts among community members. Relationships, sympathy, and social fears seem to play a role in older people's willingness to join social activities in their community.

> Not everyone comes, it's kind of-. How should I put it? Cliquism, i.e. some don't want to be with these, some don't want to be with those, so it's hard to get them all together. You only get them together when something big comes up. (Volunteer seniors' board member, town & municipality 6)

Additionally, activities offered by less well-known or new members of the community are met with scepticism. Intergenerational activities are often rejected due to conflicting values or different preferences.

> To be honest, I tend to make offers to target groups specifically […], because everything else makes no sense. Yes, it's a great goal to work intergenerationally, […] but by and large, elders feel disturbed by children, […] I can't put young people in there who are a bit louder or who perhaps use a different language. (Social worker, multi-generational house, town 6)

These relationship barriers hint at socio-emotional selectivity as well as continuity theory. Social engagement depends on the relationships among potential participants and between provider and target group. Cornwall (2004) used the term 'invited spaces' to describe top-down participation offers provided by outsiders to the community, where there are unbalanced power relations, which might result in reduced uptake. In the Uckermark, intergenerational activities, despite being promoted by federal programs, are not widely appreciated. Our interviewees thus offer more age-specific activities to reduce potential conflict. Furthermore, different cliques seem to prefer their own company. Onishi and colleagues (2023) report similar strategies among seniors in rural Japan of maintaining interpersonal boundaries during activities within the wider community. These social segregation tendencies can also serve as a means of maintaining one's cultural or socioeconomic identity in the community (Goll et al., 2015; Winterton and Hulme Chambers, 2017).

On the other hand, Onishi and colleagues (2023) also describe how older Japanese adults are expected to engage in rural community activities based on social norms of reciprocity and altruism. Such expectations were not mentioned explicitly by our interviewees, though they become apparent in their wish for more engagement of older people for the rural community's sake. Social norms could also work as a barrier to the participation of certain groups, as Marsh and colleagues (2018) have shown for widows in rural communities in Sri Lanka. Our interviewees also mentioned social fears that might hinder seniors in joining large, closed organizations.

> Perhaps they are afraid of joining such a closed association. That they feel like outsiders at the beginning is also really difficult. We are a hundred members, you have to imagine it like a big family. So I know everyone by their first name and when you're a new member, it's a bit difficult. (Volunteer seniors' club organizer, town 1)

Fear of rejection has been described as a participation barrier in rural Sri Lanka (Marsh et al., 2018) and London (Goll et al., 2015), and Winterton and Hulme Chambers (2017) report that seniors in rural Australia were reluctant to join activities without other members of their own ethnic group. Social barriers, pressures, and conflicts between groups highlight the ambivalent nature of interpersonal relationships – especially in rural regions due to the lack of anonymity and alternative options (Slama, 2004) – which can have both positive and negative psychosocial and health effects (Rook, 1984; Antonucci et al., 1998). However, such disagreements also bear the potential to improve community relationships, though this would require specific strategies to work through and create mutual understanding and trust (Goll et al., 2015; Naito et al., 2021; Onishi et al., 2023).

4.3.7. *Regional mentality*

According to our interviewees, a particular 'Uckermark mentality' prevents people from adopting new things or changing their ways too quickly. It might therefore take several attempts and much encouragement to get seniors to join social activities. At the same time, such a mentality might help established participation opportunities to continue.

> I have […] come to know the Uckermärker as a stubborn goat. […] It always takes a little longer, it always takes a second, third attempt to push certain things in the voluntary sector. But when you have pushed it and when there is one or another village mother hen […] it runs almost automatically. […] The Uckermärker always goes slowly, but he goes. (Manager, social association, town & municipality 2)

While attributes such as conservatism and distrust of outsiders are often ascribed to rural communities in general, it is important to pay

attention to the 'cultural geography' (Slama, 2004), meaning the differences in thoughts, norms, and practices between and within rural communities. Geographic psychology research in Germany has supported some ideas about different regional mentalities, showing north/south, urban/rural, and west/east differences in the Big Five personality traits (Obschonka et al., 2019). In fact, people living in the Uckermark (combined with a neighbouring district) showed the lowest rates of extraversion and openness and higher rates of agreeableness and neuroticism. Similar tendencies are reflected in our experts' description of community conflicts and the preference for reducing tensions by offering group-specific activities. Remaining wary of stereotyping and acknowledging changes due to migration and increased cultural exchange, further investigations into local mentalities could help to better understand older people's participation patterns and preferences in different rural regions.

4.3.8. *Lack of sustainability*

Maintaining long-term opportunities for seniors' social participation was described as a major challenge. While older members leave social groups due to declining physical health or death, too few new members join groups as participants or organizers. This slowly leads to the dissolution of groups, without a timely formation of new ones. This process was said to have been amplified by the COVID-19 pandemic.

> Because two years have gone by, [volunteers] could not work, are now out of the picture for health reasons, and new blood could not be trained properly, could not be taken along, this natural growth. There is a position missing. So Corona has done more than just cancelled events. […] So that this natural club life, which then generates itself, was interrupted. (Manager, social association, town & municipality 2)

Another problem concerning the sustainability of social participation opportunities arises from public funding policies and bureaucracies. Interviewees criticized the fact that projects receive financing only for a limited time period without options for long-term continuation. Additionally, funding often comes with a high bureaucratic burden and requirements such as intergenerational participation, which overstrain volunteers or do not match participants' interests. Interviewees criticized the fact that social care for older people and other groups too often relies on voluntary work without adequate acknowledgement or compensation, while public institutions lack the time and personnel to take action.

> So if you say that the project will only last three years or two years, then you have built up something with a lot of effort […] which will totally slip down again later. […] The offices are out of question because they can't have contact with every citizen. The local mayors do it on the side, the responsible community representatives also do it on a voluntary basis, and most of them still have a job. So no one cares directly about this whole track when it collapses again. (Volunteer citizens' initiative organizer, municipality 4)

The combination of infrastructural deficits, lack of federal support, and low individual-level motivation have led to the dissolution of social clubs and associations in the past. Between 2006 and 2016, up to 30 percent of the social clubs in Germany were dissolved; this was especially pronounced in rural areas like the Uckermark (Gilroy et al., 2018). The amplification of these tendencies due to restrictions during the COVID-19 pandemic led to the partial collapse of established networks, which has also been observed for rural regions in Japan (Naito et al., 2021). In the Uckermark, precarious networks of volunteers compensate for the lack of infrastructure and provide alternatives, not only for social participation but also for general community services such as public transport. These neighbourhood support networks operating at an interpersonal and community level have been described for other rural regions (Rozanova et al., 2008; Gilroy et al., 2018) and require a continuous negotiation of state and voluntary responsibilities. However, as Winterton and colleagues (Winterton and Warburton, 2014; Winterton and Hulme Chambers, 2017) have critically discussed for social initiatives in rural Australia, the frequent delegation of community services to volunteers might contribute to a lack of sustainability and weakened infrastructure.

4.4. *Suggestions to secure and improve rural seniors' social participation*

Interviewees suggested measures to secure and improve the situation and address the challenges described in the previous sections.

4.4.1. *Placing seniors' social participation on the political agenda*

Interviewees highlighted the fundamental necessity of including older people's living situation in rural areas – including their social participation – in the political agenda of national, federal, and local agents and administrations. They recognized the importance of more general public issues, such as unemployment or high inflation, and the interests of other community groups such as children, adolescents, and migrants. However, interviewees also considered care for seniors' living conditions and participation options to be the duty of politicians and local associations. This would entail taking responsibility by establishing a baseline of federal employees to foster social participation, as well as providing adequate funding for projects and financial compensation for volunteers, improving infrastructure, and reducing bureaucracy to enable voluntary work.

> So that there are also development directions, which the federal and state governments implement as well. […] So that there is also a political insight. […] I am glad that there is the mayor and the municipal administration, which see the thing positively. […] And I would like to see the same at the state and federal level. (Manager, social association, town & municipality 2)

> I think [charities] still have a duty, because they are also promoted and supported by the state. And there must be a little more, I expect a little more support in the future. […] But several people must be involved, and in the higher ranks, they must also become aware of their responsibility. They have to be aware that if they hold this position, they also bear responsibility for such projects. That is what I would like to see. (Volunteer citizens' initiative organizer, municipality 4)

Our data highlights how seniors' lives are entangled with other generations and social groups, because the latter either directly shape the social participation environment as volunteers or are affected by the same structural developments. As Skinner and Winterton (2018) have described, there are 'contested spaces' of conflicting policies, discourses, and interactions among different groups within the rural community and beyond in relation to the aging population. On the one hand, there is competition for affordable housing and meeting locations, as well as contested financial resources and political priorities, between seniors, the working population, children, adolescents, migrants, and urban newcomers. On the other hand, there are shared interests, social support and engagement offers, and mutually beneficial influences, such as maintaining the public transport infrastructure, which is often tied to school transport needs. A political approach that strengthens public infrastructure and services for other social groups and generations, such as medical care, housing, schools, and job opportunities, could therefore lead to positive spillover effects (Angelucci and Di Maro, 2016) and thus benefit older adults' social participation.

Two guidelines published in 2016 by the German Federal Ministry of Transport and Digital Infrastructure promote exactly this targeting of (older) rural populations' needs in terms of public transportation as well as age-friendly housing and aging in place (Kaether et al., 2016; Sommer et al., 2016). While acknowledging federal responsibilities, these guidelines also highlight the special role of volunteers in rural regions. The fact that, in 2022, our experts described ongoing problems and

stressed the importance of political action suggests that there has been a delay in implementing the abovementioned guidelines, presumably due to unclear funding and realization responsibilities, austerity measures, and the COVID-19 pandemic. While the government is obliged to provide public services for the rural population, their realization is subject to interpretation and guidelines are not legally binding. A specific federal funding program was later issued in 2022 to support initiatives directed at encouraging older people's social participation and reducing social isolation, but none of these initiatives are located in the Uckermark (Bundesamt für Familie und zivilgesellschaftliche Aufgaben, 2022).

4.4.2. *Networking for efficient usage of resources, personnel, and expertise*

Our interviewees suggested building networks and collaborations with local agents to bundle resources and expertise. This would require a reorganization of public and voluntary agents. Especially when clubs and associations close due to lack of funding, organizers, or participants, new opportunities for social participation need to be formed for those who are in need and interested.

> We formed in 2018 in October because Association 4 ceased to operate at the end of 2018. No one was found-. Of course, it was much further ahead, much bigger. There was a local club of Association 4 in almost every larger town. And when it was foreseeable that this would end, we decided to found Association 3 here in our town 5 and in the surrounding area. (Volunteer seniors' club organizer, town & municipality 5)

Such reorganization also takes the form of volunteer work when no public services are available. For instance, neighbours may support each other to compensate, in part, for missing public transport and to provide community. To support and spread such initiatives, networks between volunteers, charities, public administrations, and local companies have been formed, for example in the form of a 'citizens' car', filling the gap of public transport and taxi coverage.

> The interest group founded itself two, three years ago. Out of the situation of need. They started to simply implement one or the other service. Until they came to the conclusion, oh, the need is much higher. […] And they also turned to the mayor. What can you do? […] Application to the community bank for partial financing of a car. […] [To a] Wind energy company, which then financed the rest and provided the car. (Manager, social association, town & municipality 2)

Networking was said to also benefit other rural regions through the sharing of knowledge and experience, thereby facilitating social project implementation.

> Yes, I say [to another volunteer], "Yes, you could have exactly the same principle". "Yeah, but we're not getting anywhere there". So, what [did I] do? Got an appointment with the district director or mayor, and […] the next few days I'm going to go up there and talk to him and see if he doesn't want to start this project, because we still have a little bit of time. […] Because otherwise nothing will move here. (Volunteer citizens' initiative organizer, municipality 4)

The need for collaboration with local and government agents was also concluded in studies in rural Japan (Naito et al., 2021) and Canada (Levasseur et al., 2021). Levasseur and colleagues (2021) especially stressed the importance of bringing together actors from all public domains in the community, including health and social care, culture, education, and municipalities. That is because health, social participation, and rural living and transportation are experienced as interdependent domains in the daily lives of the rural population, both seniors (Carver et al., 2018) and municipal and volunteer organizers alike (as in our study).

4.4.3. *Tailoring social activity offers to increase suitability and uptake*

Some of the solution strategies refer to the nature of social participation offers. For one, they were said to work better when initiated 'bottom-up' instead of implemented based on larger programs. Regular feedback from community members should be gathered to improve quality, tailor the thematic focus, and align with seniors' financial resources in order to increase participation and reach isolated individuals.

> Of course, I also have some members, especially women who were divorced in the GDR, who have problems with their pensions. We also have to take them into consideration, so we have to make offers in that direction. (Volunteer seniors' club organizer, town 1)

Communication and information about events and groups should be proactive and direct. Smaller, local participation opportunities were considered low-threshold offers that should be preserved next to larger, regionally centralized offers.

> And these small local events must be preserved. It's very important to say: "Life still has a quality in the countryside". […] Because that is at home, it is local, I can walk there […]. You can be taken there with a walker. You can also say, "I'll pick you up quickly". We do that here, too. And this little […] puzzle game, that has to be preserved. (Volunteer citizens' initiative organizer, municipality 4)

This highlights the importance of maintaining variety in participation options to cater to different preferences in terms of thematic focus, group size, level of formality, distance to people's homes, relationships, and values. The approach of 'one size fits all' is generally rejected by researchers of older people's social inclusion in rural areas (Kenny et al., 2015). Especially in light of the 'death of social clubs' in Germany and generational differences, developing new and tailored forms of social engagement seems necessary. As Fischl and colleagues (2020) suggest for the development of age-friendly technology, participatory approaches to co-creating activities and group formats could help to find suitable forms of social engagement for and with older people living in rural areas. Wildman and colleagues (2019), in northeast England, also highlight the importance of co-production to meet local needs and inspire motivation for sustainable engagement in community projects. Furthermore, as Winterton and Hulme Chambers (2017) have shown for ethnic-minority seniors in rural Australia, there is a need for cultural specificity in social participation opportunities. Cultural boundaries in the community should be considered and might require mediation when implementing sustainable programs. Finally, tailoring participation opportunities seems sensible to help seniors find activities that reinforce their identity (Goll et al., 2015), which is likely to be challenged by the loss of physical health, employment, and meaningful relationships in old age (Spini and Jopp, 2014). Tailored social participation offers could thereby help seniors create a sense of personal and regional continuity, while also allowing for individuality and change in later stages of life.

5. Conclusion

Our study highlights the challenges to the social participation of seniors living in a structurally weak and rapidly aging rural region in Germany. The expert interviewees and geocoding illustrate a sufficient offering of social clubs and activities for the rural senior population, despite their overall diminishing number. However, our expert interviewees also revealed many challenges. Their descriptions of the barriers to seniors' social participation in the Uckermark highlight obvious and more subtle individual, social, and structural mechanisms of life in the county. The similarities with previous research on seniors' social life in rural areas suggest a universality of the more frequently discussed barriers of declining physical health combined with poverty, poor infrastructure, and lack of sustainability. They highlight the biological and structural underpinnings of seniors' social disengagement. The frequently reported solution strategies – political prioritization of seniors' lives, networking in the rural community – address these

structural problems. As a first step in order to specify such general recommendations, it is important to recognize the complexity of rural structures, as they provide for and are shaped by different population groups as well as historical, economic, and sociocultural developments in a particular region. For the Uckermark, we tried to show how these include the GDR structures, changes after the German reunification, ongoing demographic developments, and recent events such as the COVID-19 pandemic.

The similarities between rural regions in terms of experiencing and trying to deal with challenges to seniors' social participation could create expectations of univocal scientific evidence regarding the patterns and health effects of rural-living seniors' social integration. In addition to the abovementioned regionally specific structural influences, some challenges relate to more dynamic, sometimes ambivalent, factors and are thus likely to differ within and between rural areas. These include variances in individual and group preferences and motivation, local relationships and norms, and regional mentality and identity. Theories of socio-emotional selectivity and continuity in old age suggest explanations for these tendencies among (rural) older adults. Consequently, the strategy to tailor social participation options to the older rural community and sub-groups was a suggestion given by our interviewees and participants of other studies.

As a second step, future research should expand on questions of changing needs and motivations of different older generations and social groups, local values and history, and relationships among the rural community in a more nuanced way. This could help acknowledge the heterogeneity and dynamic nature of ageing and rurality at the community and individual level (Skinner and Winterton, 2018; Jensen et al., 2020) and inform improved social and health interventions for the rural community. Bringing together the challenges at the structural, social, and individual levels, it seems important to invest in rural structures overall – to benefit both seniors and other population groups – in addition to tailored social activity offers that pay attention to regional relationships and culture.

CRediT authorship contribution statement

Anke Desch: Data curation, Formal analysis, Investigation, Methodology, Project administration, Writing – original draft. **Christine Holmberg:** Conceptualization, Funding acquisition, Supervision, Writing – review & editing. **Niklas Demmerer:** Data curation, Formal analysis, Visualization. **Sylvia Euler:** Conceptualization, Funding acquisition, Methodology. **Philipp Jaehn:** Conceptualization, Methodology, Supervision, Writing – review & editing. **Andreas Bergholz:** Conceptualization, Data curation, Formal analysis, Methodology, Project administration, Supervision, Visualization, Writing – review & editing.

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Data availability

Quantitative data will be made available on request; the authors do not have permission to share qualitative data.

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