Vulnerability to Food Insecurity among Older People: The Role of Social Capital

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Abstract

Food insecurity is a public health issue in Western countries, including the UK. Being food-insecure means older adults may not access sufficient nutritious, safe, and socially acceptable food, leading to a higher risk of malnutrition. We conducted a qualitative study of 25 households with men and women aged 60–95 years to investigate how older adults access food and to explore social capital, which might contribute to food security or prevent malnutrition. We conducted participant-led kitchen tours, interviews, photo, and video elicitation across multiple household visits. In addition, we brought stakeholders together from a range of sectors in a workshop to explore how they might respond to our empirical findings, through playing a serious game based on scenarios drawn from our data. This was a successful way to engage a diverse audience to identify possible solutions to threats to food security in later life. Analysis of the data showed that older people's physical and mental health status and the local food environment often had a negative impact on food security. Older people leveraged social capital through reciprocal bonding and bridging social networks which supported the maintenance of food security. Data were collected before COVID-19, but the pandemic amplifies the utility of our study findings. Many social elements associated with food practices as well as how people shop have changed because of COVID-19 and other global and national events, including a cost-of-living crisis. To prevent ongoing adverse impacts on food security, focus and funding should be directed to re-establishment of social opportunities and rebuilding bridging social capital.

Keywords

ageing, food practices, food security, social capital, social networks, vulnerability

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Introduction

This article explores findings from a qualitative study of older people's food practices, including findings from a workshop with diverse stakeholders involved or interested in supporting older people. In earlier analyses, the authors developed a food security framework for considering older people's vulnerability to food insecurity and malnutrition to demonstrate that food security is a socially constructed phenomenon (Dickinson et al., 2021). This article will focus on findings related to one domain of the vulnerability framework, that of coping capacity. Coping capacity incorporates the assets people draw on to prevent them from experiencing a bad outcome (in this case, food insecurity) as well as adaptations made by people to help them recover and move away from a bad outcome. It comprises 'individual capacities', 'formal support', and social networks' (Schroder-Butterfill, 2012). The article will explore how social capital manifests in later life and the impact this has on older people's coping capacity and in protecting older people from food insecurity.

We draw on the definition of food insecurity proposed by Dowler and O'Connor (2012), 'the inability to consume an adequate quality or sufficient quantity of food in *socially acceptable ways*, or the uncertainty that one will be able to do so' (p45; our emphasis added). Evidence suggests that people often face an accumulation of challenging issues that can impact on their food security as they age (Dickinson et al., 2021). This includes changes to physical and mental health, as well as bereavement, and barriers within the local food environment. Local food environment challenges include accessibility issues, including parking and toilet facilities as well as food retailers focusing price reductions towards households who purchase significantly more food than an older person requires. The ways that household coping capacity develops or is sustained in later life to support food security is not well understood. This includes a lack of appreciation of the value and impact of having effective social networks and the role more formal support plays, through lunch clubs, or a meals-on-wheels or befriending service, for example.

Social capital is conceptualised from different positions, including Bourdieu's belief that capital develops through socially constructed group membership (Bourdieu, 1986): Coleman's focus on capital arising from personal relationships (Coleman, 1998) and Putnam's expansion of the concept of social capital to incorporate norms, network ties, and civic or community participation (Putnam, 1995, 2000). Social capital can be described as the 'value added gains' from having social networks to draw on (Nahapiet and Ghoshal, 1998), perhaps from knowing that as individuals we have trusted others to call on, both routinely or to help during a crisis (Woolcock and Narayan, 2000). Social capital can benefit individuals, households, or communities in terms of reciprocal relationships that forge identity, belonging, and positive outcomes. Woolcock and Narayan state that for social capital operating at a community level:

> communities endowed with a diverse stock of social networks and civic associations are in a stronger position to confront poverty and vulnerability. (p. 226)

Previous academic studies have highlighted the important role that social networks can play in the lives of older people (Cornwell and Schafer, 2016). However, social networks

generally shrink as people get older (Kemperman et al., 2019). In addition to shrinking in size, social networks change in response to disruptions caused by bereavement and loss of close family and friends, but the nature of networks also changes, shifting to incorporate provision of more instrumental (help with food shopping, for example) and physical support (to heat up food, for example) as physical health declines (Broese van Groenou and van Tilburg, 1997). Some research suggests that a decline in social interaction is a 'natural' part of ageing (Pinto and Neri, 2017). However, others have found that an accumulation of health-related issues might shape a withdrawal from social networks, suggesting this change might be preventable and not desirable at an individual or population level (Agahi et al., 2006; Curtis et al., 2015). Geithner and Wagner (2022) found that older people who were the most engaged with their social networks had the highest level of social capital and this was bi-directional, so older adults with established levels of social capital were able to stay more engaged in social activities into later life. The strength of ties is important though, with strong ties to personal contacts likely to provide support, and weaker ties, which might arise from networks of 'dissimilar' individuals, building capital that provides access to community resources (Cattell, 2001).

Putnam defines and describes two elements: bonding and bridging social capital (Putnam, 1995). Bonding social capital is developed from having close relationships and strong ties between individuals who share a connection through shared identity and belonging. Bridging social capital develops through connections within trusted communities, through groups that someone interacts with and benefits from being involved with. Putnam's work is often contested as his understanding of social capital does not fully represent the way that networks are underpinned by socially bounded and dynamic relationships (Kirkby-Geddes et al., 2013). People tend to make strong connections with others who are 'like them', so in terms of social bonds it makes sense that, as social beings, we prefer to spend time with people we like, love, trust, or have something in common with. Organisations that might offer bridging opportunities for older people to develop social capital through, which might support food security, are also not socially impartial though, nor are they homogeneous as Putnam pertains (Putnam, 2000). Lunch clubs, supermarkets, local food stores, and meals on wheels services are located in geographic places as well as social spaces where they can feasibly operate, in terms of profit in the case of retailers or in terms of available premises, volunteers, and funding, in the case of social enterprises, third-sector organisations or subsidised services. Building social capital through bridging relationships is something we understand as part of a socially constructed habitus, with unequal 'rules of the game' in operation (Bourdieu, 1984, 1986), rather than merely being an indicator of having a cohesive geographically bounded community, irrespective of local politics, identity, or socioeconomic status. Older people who can access food from outlets that are accessible from a physical perspective but where they also feel socially connected and comfortable are perhaps more likely to develop bridging social capital and ties (even if weak) that support their food security, in terms of quality and acceptability of the food on offer.

While Putnam's understanding of different elements of social capital needs framing more fully using a social lens regarding community participation and resources, this article will explore how older people develop or benefit from bridging and bonding social capital in relation to their food practices and whether and how this acts as a

coping mechanism to promote food security as there remains a need for a deeper understanding of the mechanisms through which people can be supported to live and eat well in later life.

Research design and methods

The study used an ethnographic approach which built on our earlier empirical work (Dickinson et al., 2014; Wills et al., 2013, 2015) of food and eating in older populations. A multiple-method approach used over a number of household visits with participants enabled us to capture and analyse everyday food acquisition, preparation, and consumption practices. Fieldwork began in participants' kitchens, and they were invited to guide us around their kitchen and other spaces associated with food, including garden spaces. The researcher asked questions and encouraged participants to explain what they were doing and why (Pink, 2007). The researcher took photographs that captured items placed in and on cupboards, fridges, freezers and worktops, pantries, and other spaces where food was stored and prepared. This was followed by a series of visits (up to four with each household) where informal interviews, photo, and video elicitation were undertaken using a topic guide. We accompanied household members on trips to supermarkets and local shops, as well as allotments, cafes, lunch groups, and coffee mornings, and these visits were filmed using wearable cameras. The data collection enabled food practices to be captured as they were enacted, rather than relying on self-reports. Although Schatzki et al. (2001) caution against over-relying on verbal accounts, listening to how people account for what they are doing, as well as collecting other forms of data is important to enable researchers to understand everyday practices and learn about 'common sense' beliefs and tacit understandings. We explored food-related practices in depth with 25 households involving individuals aged 60–95 years. The 25 households recruited included people living with a spouse, alone, or with other family members, in urban as well as more rural areas. Some people were independent in food provisioning, and others were in receipt of assistance from informal and formal sources.

Analysis

Data constituted 50 interview transcripts, 1270 photographs, 23 hours of film, 20 food logs from participants, and 25 sets of fieldnotes. Interviews and kitchen tours were audio-recorded, fully transcribed, and anonymised. We used an interpretative engagement approach as used in earlier work (Wills et al., 2015) to analyse the data. This involved a preliminary exploration of the data based on familiarisation of full datasets for each household by reading the transcripts, fieldnotes, and food logs, watching film footage and examining the photographs. Data were cross-examined across households, and visual data were used to corroborate or expand verbal accounts, for example (Brannen, 2005). This initial analysis enabled us to identify emergent themes which were used to inform production of a summary for each household. These summaries supported cross-household analysis. In addition, all textual data were imported into NVivo and coded initially using the Schroder-Butterfill and Marianti (2006) adapted model of vulnerability as a starting point, as this framework had proven effective in some of our earlier work

(Dickinson et al., 2021). This model comprises four domains: exposure (aligned with the social determinants of health such as gender and income), threats (including 'specific events, shocks or crises', includes major events such as bereavement and illness that can move people towards a bad outcome), coping capacity (incorporates the assets people draw on to protect themselves from a bad outcome, and includes resources drawn from social capital), and bad outcomes (in this case food insecurity). As analysis progressed, in order to incorporate new themes into the coding framework, we developed and extended the original model to incorporate the concepts of 'cumulative trivia' (often minor events that accumulated to shift people towards a bad outcome) (Newall et al., 2006), which included issues such as poorly considered parking preventing people from easily accessing shops but also the idea of an 'aggregation of marginal gains' (Slater, 2012) where small interventions (such as providing in store seating) could accumulate to increase coping capacity (Dickinson et al., 2021).

Stakeholder workshop

Once data analysis had been completed, we invited stakeholders to attend a workshop, to discuss the themes identified, and explore potential solutions to food insecurity for older people. We brought together a wide range of individuals (*n*=30) to represent health, social care, public health, housing, the voluntary sector, meals on wheels providers, wider civil society, and commercial organisations including supermarkets and specialist food providers. Older people from our Centre's Public Involvement in Research Group were also invited to participate at this 1-day workshop. We presented findings from the study and invited participants to 'work through' scenarios drawing on our data using a prototype for an educational boardgame which we developed as an output from this study. The game comprised a board with a numbered trail printed on it (similar to 'snakes and ladders'), a die and counters. We divided participants into four groups with a mix of stakeholders and a facilitator from the research team in each group. The numbers on the board were linked to 12 scenarios developed from the empirical data. Scenarios focused on different topics, including transport to local shops, discounts offered by retailers, growing food, attending lunch clubs (an example is provided, below), and the shopping environment. Participants moved around the board in response to the number on the die, and then the associated scenario was read out. Participants were encouraged to discuss the scenario drawing on their own or their organisation's perspective, with a question provided to provoke discussion. A timer was used to ensure discussion moved on in a timely fashion, and the discussions were audio-recorded and transcribed. Data from the workshops were analysed against the same thematic framework used for the household data, and used as a form of member checking or testing of the data from the ethnographic work. For the purposes of this article, the workshop data were subject to a further analysis by the authors, to explore specifically the concepts of social capital and social networks.

Example of a workshop scenario:

Lunch clubs are small community groups providing regular opportunities for older people to enjoy companionship and a hot meal at an affordable price for their membership. According to

Chris Burton, 82, who sits on his local lunch club committee, there are on average about forty regular attendees who come for lunch; down from around 100 people who used to come for lunch each day a few years ago when lunch clubs were more popular. He suggests that the decline in the number of people attending his local lunch club is partly as a result of the increase in people having meals from food delivery companies as well as dwindling local council funding to support such centres.

Question to prompt discussion among workshop participants:

Do you agree with Chris that lunch clubs are not as popular for the reasons he proposes and what else could be done to get more people involved in attending lunch clubs to stem their perceived decline?

Ethics approval for the study was gained from the University of Hertfordshire Ethics Committee with delegated authority (reference: cHSK/SF/UH/00073).

Below, we present findings from the analysis of empirical data generated with older people along with findings from analysis of the discussions from the stakeholder workshop.

Findings

The analysis highlighted how social capital became operationalised through social networks for the maintenance of food security. Bonding social capital and the resources associated with these bonds were demonstrated within close relationships, and strong ties between individuals such as family and friends. Bridging capital was demonstrated through encounters, sometimes even fleeting encounters with individuals working or volunteering for local organisations or businesses. Social capital shaped people's experiences of vulnerability as older people were able to leverage resources through their social networks, to maintain their food security despite sometimes having limited ability to undertake food work for themselves. The resources associated with social capital included emotional and instrumental aspects and were determined by people's close kin, with daughters and sons of participants supporting their parents through assisting with, for example, food acquisition and cooking. These bonding ties were not unidirectional, with older people providing support to other members of their family, including providing childcare and financial support, for example, and the wider community. In addition to social capital influencing food security, it also impacted on the wider aspects of health and well-being, supporting emotional health and addressing loneliness. Being connected within a community, whether through encounters at the supermarket or with a lunch club helped establish bridging capital that clearly 'pieced together' older people's daily lives and influenced their quality of life.

In the following sections, we present an analysis of how social capital operates to enhance older people's food security. We draw on data from households to explore bonding social capital, informed mainly by verbal accounts from participants about their bonds with friends and family. We will then move on to explore how bridging social capital operates and is drawn on and developed by participants within the wider

community, using data from households and the workshop. This analysis was informed from the breadth of data types, across photographs, video footage, transcripts, food logs, and fieldnotes. We will also present instances of households that are less successful in leveraging support through their social capital, and as a result demonstrated lower levels of capital which negatively impacted their everyday life.

Bonding social capital, coping capacity, and food security

Most of the household participants had social networks that predominantly included geographically close family and friends, who either provided instrumental support or older people said they were confident that they could draw support from these networks if they needed to, in relation to sustaining food security. These areas are illustrated with a number of detailed examples, to show how bonding social capital is operationalised in relation to food practices in day-to-day life.

Kate, who is 90 years of age, exemplifies how bonding social capital supports her to live independently in her own flat within a sheltered housing complex. Kate has had modifications made to her kitchen, including a lowered worktop, which means she can prepare hot drinks and simple snacks such as frying an egg but is no longer able to shop or cook more complex meals for herself. She has strong local kin networks, with her daughter being the main provider of food-related care. Her daughter lives nearby and prepares meals which she places in the fridge ready for Kate to reheat in a microwave. Kate explains how her daughter began to cook her meals and has also taken over food shopping and financial tasks:

> Well me daughter came one day and I was struggling in that kitchen to cook a bit of dinner she said 'Mum, this is no good, you can't do it, I only live round the corner, give it up and I'll cook, while I'm cooking a bit of dinner, it's no trouble to cook a bit extra. . . I'll bring you some round' . . . and because she's taken over, she looks after me money and everything, she'll come in, she's got bags of shopping, she's got two dinners, one for today and one for tomorrow.

She explains how she felt when her daughter began to cook for her:

> Well relieved at first because it was a struggle, it was a struggle. Occasionally, tonight for instance I've got some ham that she got me and I shall fry an egg with it, I can manage that, I can do that and I make cups of tea and things like that.

Despite living in sheltered housing with other people in close geographical proximity, Kate explains how her social links have shrunk and thus opportunities to leverage other assistance with food practices have also become diminished. People Kate knew when she first moved into the complex have either moved or died and she said she felt isolated within the accommodation. Although she attends social events, she finds it hard to make new friends. There are limited opportunities to socialise, with weekly coffee mornings being the only resource available. She attends the local church but is unable to take part in the social activities, as there is no accessible toilet for her to use.

Other participants had adult children living with them or, like Kate, above, had a close relationship with their children and these served as important bi-directional bonds that positively impacted on food security. Georgina's son had moved back to live with her following his divorce. In return, he made a financial contribution to household food purchasing, and, as he undertook much of the cooking activity, Georgina was no longer reliant on the ready meals she ate when she lived alone and felt her diet had improved from a nutritional perspective.

Maya has a close relationship with her son and his partner, who is vegetarian. Although her son and partner do not live with her, they have influenced her food choices, as they visit frequently and they all shop and cook together. When they eat out, the places they choose are influenced by the preferences and tastes of her family. Maya's son also encouraged her to join a lunch club following her retirement, to make new friends:

> My son kept saying to me, Mum, you should go to a club . . . at least I know you're doing something and you're not at home all the time.

For Georgina, Maya, and Kate, adult children were making a positive contribution to food practices, enhancing their coping capacity through an influence on their social bonds. However, not all family interventions aimed at supporting food security were welcomed, and sometimes were felt to damage the agency of the participant. Theresa felt her family was negatively interfering in her life and a lack of trust of her family's intervention efforts was clear. She has been diagnosed with Alzheimer's disease, though she contests this diagnosis. She acknowledges, though, that she has issues with her memory and has made adjustments to help her to deal with this, for example, she writes down what she has eaten in a notebook that she can refer back to. Her family has arranged a carer and meals on wheels services to deliver hot food at lunchtime, but Theresa feels that these interventions have been organised without consultation and are contrary to her wishes. She feels that they are unnecessary and that she can manage without help. She has family living within walking distance, so feels these services have been arranged because her family 'can't be bothered to come and see me or phone me up and see if I'm OK'. She does not eat the hot food as it arrives, but reheats this later in the day, which represents a food safety risk. In this instance, while Teresa had family networks that supported her food security, the bonds with family were damaged through the unwanted intervention.

Across our participating households, the contribution adult children made to household food security was variable. Not all participants had good levels of bonding social capital or family members living nearby. Paul, for example, had never married and had no children or close family near where he lived. Similarly, Grant who had lived alone since his parents died reported that he lacked cooking skills, had limited contact with his only sibling to support his food security, and instead drew on sources of social capital from the wider community. He describes his milkman as his friend and they share a passion for football; this resource represented a bond that benefitted Grant.

Bonding social capital plays a role in strengthening coping capacity in relation to food practices and protecting against vulnerability. Below, we explain how older people also

benefit from and access bridges to others within their local community, which impacts their capacity to remain food-secure.

Bridging social capital, coping capacity, and food security

Older people explained how they obtained information about services such as meals on wheels and lunch clubs from a range of sources, including word of mouth via friends and family and from GPs, to drawing on their own knowledge of relevant organisations such as Age UK, which offer things such as a befriending and shopping service. Workshop participants highlighted the need for improved mechanisms to share information about services available within local communities and highlighted that health professionals varied in their referral behaviour with some seemingly reluctant to make referrals to social services:

> And there isn't enough signposting and enough information to know where to start if you're coming into it completely cold, you know, if you don't know anything . . . how can we facilitate information going between them so that everyone knows who's responsible for who and we can see when people slip through the cracks?

Workshop participants felt that trust was an important factor in whether people took note of information from others within their community networks and some discussed how trust and social capital operated from the micro (household) to meso (community) level:

> I think the whole thing that comes out of this debate is that food security is about life and community security and you cannot take it away from it, this is about, you know, it has to be in the sort of package of wellbeing otherwise we don't really understand what it's all about, it is not about getting food into somebody at all, it's the whole thing about being part of a community and still feeling you have value.

From the household data we identified a wide range of bridging social capital that was important to participants. Those helping in bridging social capital to develop via instrumental and social support included supermarket staff, bus drivers, minicab drivers/operators, healthcare professionals, lunch club volunteers and staff, neighbours, milk delivery people, and meals on wheels delivery staff. Accessing bridging social capital also enabled people to expand their networks, supporting them to make new friends and avoid loneliness. Some people explained how they had sought out opportunities to extend their networks. Chris, for example, began to attend a lunch club in a deliberate effort for him and his late wife to expand their social networks after he was diagnosed with a life-limiting medical condition. Following the death of his wife, attending the lunch club helped support him through his grief. He then met a new partner at the lunch club. He has also extended his role from participant, to become a member of the organising committee. Chris noted that he was now involved in fundraising initiatives to finance the club. Other older people also played an active part in the running of groups that had made a positive contribution to the bridging of social capital available in the wider community. Maya was an active member of her local lunch club and had recently become its convener,

organising trips and events for members and she spent time looking for sources of funding for the club. Other participants, such as Lee and Regina were volunteers in local organisations offering a range of social support in their communities with activities such as visiting isolated people, supporting shopping, and social events,.

There was a great deal of discussion in the workshop on the topic of lunch clubs as clubs were felt to be an important bridging asset across communities, but some were felt to be struggling with falling numbers of attendees and difficulties accessing funding. Run-down buildings and facilities and local authorities facing financial pressures and being unable to update community resources were seen as barriers to enabling clubs to flourish and support older people. Lunch clubs cannot act as a social bridge without adequate physical infrastructure:

> . . . one of them was really flagging, they were struggling to get 10 people and they were in a 1960's built, old style community centre that didn't have much public access to it and all of that. They've just moved to a brand-new spanking community centre in the middle of a park . . . and within a week the take-up of the lunch club has rocketed. So the environment probably and that dated thing, exactly as you said, that dated thing.

Participants also provided bridging social capital to their wider community through less formal means. For example, Patrick is an experienced and keen allotment holder, who grows vegetables and fruit for himself and his wife and other members of the family. He explained how he acts as a mentor to other people at the allotments, sharing his knowledge and skills of growing food:

> I'm mentor for the whole allotment down there you see and it's only because I've had enough experience over my life time that a lot of these things come naturally to me and you pass on your knowledge to other people . . . I've passed it by word of mouth mostly, by experience, showing them what to do.

Social networks often operate bi-directionally. Patrick and Margaret, for example, explain how they are active members of their wider community with many examples of reciprocal bonding and bridging social capital:

> . . . we've been here about 25 years, as I say, we've become in a way honorary grandparents for a lot of the children around here. And they will help us and we will help them.

> Oh yes, when I was in hospital they brought you a big shepherd's pie didn't they?

For some individuals, bridges evolved into bonds, providing multiple ways of social capital being firmly established over a longer period, supporting and sustaining food security.

Meals on wheels services as an example of bridging capital

Several household participants received meals on wheels services as they were no longer able to cook meals for themselves because of ongoing mobility issues or because they

lacked cooking skills. Meals on wheels services provided a good example of how services could provide bridging social capital for older people. For participants who were receiving meals on wheels, and for those participating in the stakeholder workshops, these services were seen as an important source of bridging capital that supported older people to remain in their own homes, through bolstering their food security. Meals on wheels services were also important to provide reassurance for family members, particularly those who lived at a distance. A daily visit and well-being check from service providers was then especially important:

> Well then all the family and all the people that are going in and supporting that lady now know that at least she's got a hot meal going in . . . I've got another lady, her daughter lives miles, we've put the Meals on Wheels hot meals in for her and the teatime thing now because I think she would forget at teatime to go out and actually physically make the sandwich. (Workshop participant)

Meals on wheels services are in decline in the UK, and many local authority areas no longer provide a service. Frozen meals delivered by a specialist provider are an alternative, which individuals then cook in the microwave. Workshop participants highlighted the unsuitability of these meals as a 'one size fits all' solution for older people who need support with heating food and would also benefit from the social interaction that a meals on wheels delivery brings. So while frozen ready-prepared meals will meet the food needs of some older people, others will need additional support. Using our educational boardgame during the workshops helped stakeholders to talk through the benefits as well as downsides of resources such as frozen ready meals delivery in terms of this service not contributing adequately to bridging social capital. One workshop participant said, 'so [the frozen food] customer are a more able type person . . . ..' and another participant elaborated,

> Yeah, if I can just give an example as well of where sometimes online shopping doesn't work and that's for dementia, people we used to do a hot service in [London Borough] and they changed it all to a frozen service, so everyone was getting frozen meals. . .but we actually delivered to someone who actually had one of our meals on a radiator, heating up the meal on a radiator, had dementia, and we had another incidence where someone had eaten all the meals in one day because they'd forgotten they'd eaten . . . and the Council has put in a carer to cook their meals at lunchtime, which obviously costs a lot more money than getting a hot delivered meal, so you've got to weigh up those and again in terms of saving money.

In addition to the food being delivered, a spectrum of support was provided to participants in this study, along with the food delivery, including serving the food to clients and making a drink for them, cutting food up for those unable to manage this and encouraging others to eat. Each approach acted as a bridge from within an organisation, enabling the participant to maintain the level of independence they wanted, contributing to food security, and peace of mind for wider family networks.

For older people with no family nearby, services that provide a welfare check and provision of a social interaction element become even more important. This aspect was brought out by participants across all four workshop groups as well as by older people in

our household study. Enhancing social capital was perceived to be an important aspect of service provision for older people. Bridging mechanisms to achieve this included valuing and getting to know clients as individuals and treating them with respect:

> That's right, you know, when you can go in, even though it's only five minutes with someone if can make them feel valued and special, that's what enhances the desire to eat because actually I still matter as a person, and you know food it's not a transaction, it's not a case of putting nutrients into us so that we don't die, it's a case of this is part of, you know the fun of being alive and food is about making people better. (Workshop participant)

Supermarkets as mechanisms for bridging social capital

All our older participants used supermarkets on a regular basis. Some used local shops too, but these were often perceived to be more expensive and offered less choice and sometimes poorer quality fresh goods. However, shopping in supermarkets was not always straightforward and there was a perception that more could be done to support older shoppers. Supermarkets provided ways for older people to experience and benefit from building social capital. Older people spoke about the importance supermarket staff played in their experience of food shopping, and the support offered that helped them to continue to do their food shopping in store. In the video data we filmed in supermarkets, a range of customer service approaches were apparent, with some older people successfully seeking support as they shopped and enjoying social connection with staff. One workshop participant commented that

> . . . most supermarket workers are lovely people, they always want to help out and make everyone else as nice as, as best they can, they want, you know, to be there to make it a nice experience.

However, this was not everyone's experience, raising the need for training in how to support older shoppers. All the workshop groups shared ideas of how supermarkets could improve their services in a way that better supported older shoppers' social capital. Focusing on older shoppers was felt to have commercial benefits, as it was likely to increase the number of older shoppers using a particular supermarket and influence the amount they spend. Ideas for interventions that would support older people included providing 'shopping buddies' to shop with individuals in store, dedicated shopping times for a more relaxed experience and additional seating where people could rest and chat with other people. An appropriate built environment was essential, to underpin the relational aspects of the social benefits of shopping in supermarkets:

> And it would benefit the shops because in the long run they'll end up buying more than they absolutely intended to go in for, like we all do, if they can get out and have that buddy. (Workshop participant)

There was a sense that supermarkets needed to adapt to the changing needs of an ageing population and take their needs seriously, also giving them a commercial advantage:

> If you could get one supermarket to do it everyone else would follow 'cos the loyalty, that would generate from that person, if he knows that he's got a buddy when he goes on a Thursday to get his shopping he will always go to that supermarket and other people will start going there as well 'cos again something that come out of your study was word of mouth, and I'd try that. (Workshop participant)

Ensuring appropriate transportation for food shopping was an issue described by both older participants and workshop groups. Some older people used taxis, but there was variation in the level of service, with some drivers carrying shopping bags to the door for older clients, and others who would not help by lifting bags into and out of the taxi. The community bus service that took older people to supermarkets led to challenges for those using the service as they only had an hour to shop, so felt rushed:

> . . . the people we work with they say it's the most significant thing that will stop them from getting out because they don't feel that they can cope with transport or they're worried about maybe not having access to their own transport and that can be the difference.

In summary, the need for more joined up thinking around food provision for older people is clearly important. Examining and mapping social capital across local communities would be a useful starting point and ensuring inclusion of a wider group within consultations, such as local food businesses is important to support more creative and inclusive solutions:

> So I think when commissioners are looking at what community services are available if it is going to be publicly funded one way they ought to build in accessibility as part of the solution so rather than this sort of silo mentality, just thinking about food, it's not about food, it's about the whole experience and actually getting someone there and then the wider social issues that go on and I think starting to think more holistically which is very much what this research is showing, that it is holistic problems which need holistic solutions, I think that's crucial. (Workshop participant)

Discussion

This study makes an innovative and robust contribution to understandings of food insecurity in later life as a socially informed issue. It highlights the ways that household and community coping capacity to avoid food insecurity can be enhanced through having social capital. We have shown how both bonding and bridging social capital impact on the coping capacity of older people and how both elements play a part in supporting older people's ability to continue to be independent as they age, delaying the need for additional (and more expensive) services either within the home or through moving to residential care. By using multiple visual and qualitative research methods in the study of household food-related practices, we were able to analyse data that illustrate the known, accounted for aspects of daily routines along with the more unconscious and often hidden parts of everyday practices, bringing both to the attention of participants for discussion (Kusenbach, 2003; Wills et al., 2015). A limitation of our analysis is not fully considering the role of gender and its impact on how social capital informs the

sustainability of food security. The study was enhanced, however, through bringing a diverse group of stakeholders together to discuss the findings through use of a prototype educational board game. This drew on scenarios from the research and engaged participants in a creative way with the data, moving the discussion towards barriers and solutions to supporting food security in later life. An important point to come out of the workshop discussions was the issue of food in its wider social context, demonstrating that food security is much broader than just enabling older people to access good food and nutrients (important though this is). The game brought together participants who might not otherwise have an opportunity to discuss research findings and the board game format encouraged all participants to feel able to engage in a productive and enjoyable way. One of the workshop attendees commented, 'Oh that was probably one of the best workshops I've been to for a while'. Following the success of using the prototype game, we worked with a serious game company to produce a commercial version to provide an opportunity for other community groups, healthcare providers, older people, as well as educationalists to use the study findings to inform their understanding of food security and what they or their organisations can do to maintain or improve this (Food In Later Life Game).

Social interactions are thought to be beneficial at an emotional and instrumental level and can enhance quality of life and a sense of identity. Studies of social capital in relation to food security are scarce, though one literature review concluded that social capital acted to support food security through the sharing of knowledge and this was highlighted through our empirical and workshop findings (Nosratabadi et al., 2020). A focus on older people in studies of social capital and food security is rare. Martin et al. (2004) found that having social capital in one town in the USA was associated with a lower likelihood of being hungry or food insecure and that household as well as community social capital acted as protective mechanisms. They reported that households of older people were less likely to be food insecure than other household types, partly as a result of more community interaction and living in the same house/place for a longer period, with greater likelihood of social capital being acquired as a result of such factors. This highlights the risk for older people who move into assisted living or other residential settings as their needs change, and long-established social bonds or bridging ties become weakened, which could threaten support for food security. Losing access to a preferred supermarket or lunch club, through closure or layout changes for example, would also weaken the capital older people develop through such infrastructure. One further study within high-income countries (Nosratabadi et al., 2020), reported within a review of literature, supports the evidence that higher social capital is associated with lower food security among adults aged 50+ years, though again this study focused on only one area of the USA (Dean et al., 2011). In a study of a lunch club in the UK, Tsofliou et al. (2020) found that the lunch club led to a significant increase in nutrient intake on days people attended; eating a hot meal was important to three-quarters of older participants, while meeting with friends was important for 92.3% of attendees.

While our study provides important findings relating to social capital and its role for food security in later life, more research is now needed to ensure social capital can be adequately measured and the differences in what this means for older adults versus other household types further articulated to ensure the benefits of social capital are not

conflated from evidence across the life course (Martin et al., 2004; Putnam, 2000). Enhancing social capital has multiple benefits in terms of reciprocal bonding within social networks and bridging links into the wider community and therefore health and social care professionals, local authorities, civic society organisations, and the general population can promote food security for older people through supporting the development and sustainability of social capital. However, it is important that promoting social capital within communities is not viewed as a replacement for greater government investment in pensions, welfare benefits, and other services and initiatives that support older people to live well in later life. There is a risk, if taking a rigid view of Putnam's framing of how bridging social capital operates, that the emphasis for making bridging links is *wholly* shifted onto individuals and communities rather than expecting local and national government to take responsibility for system-level changes to infrastructure (Kirkby-Geddes et al., 2013). We therefore urge others to consider the social context that drives the location of organisations and services within communities when considering how these provide opportunities for bridging social capital to develop for older people.

The UK government has talked about 'building back better' as the country recovers from the COVID-19 pandemic. However, as well as the pandemic, the UK is also dealing with the impact of leaving the EU and a cost of living crisis which is leading to increasing energy and food prices and inflationary rises. All these challenges have the potential to impact on the lives of older people, with Age UK warning about the increase in pensioner poverty (Age UK, 2022). People will increasingly be having to choose between eating and heating, and the UK already has one of the highest rates of excess winter deaths (Office for National Statistics, 2021).

The pandemic has had a differential impact on the UK population, with older people being one of the groups asked to shield and others choosing to severely restrict their social interactions to protect themselves and vulnerable members of their community from disease. This has severely restricted opportunities to take advantage of the benefits of social networks and, without spaces where weak ties can flourish, social capital becomes diminished (Kirkby-Geddes et al., 2013). The importance of neighbours during the early stages of the COVID-19 pandemic was highlighted in studies in Scotland and the East of England (Brown and Reid, 2021; Thompson et al., 2020), where older people improved social connections or reconnected with neighbours but older people were reluctant to ask for instrumental support for fear of being a burden; they therefore limited the food items they asked others to buy for them. Bridging ties have been affected within local communities, as lunch groups and other social activity groups were closed during the pandemic (Brown and Reid, 2021) and have been relatively slow to reopen, with evidence that some of these groups may never reopen, for a range of reasons. Many older people may have changed their food acquisition practices, with many no longer shopping in person in supermarkets (Pantano et al., 2020). This limits older people's social engagement with others outside the home, as well as restricting exercise opportunities and engagement with the physical environment in local neighbourhoods. There are fears that there may be an epidemic of falls due to these limitations and an impact on physical activity (Said et al., 2020).

To build back better, focus and funding should be directed to re-establishment of social opportunities and rebuilding bridging social capital, including promoting places where people can come together and share food.

References

Agahi N, Ahacic K and Parker MG (2006) Continuity of leisure participation from Middle Age to Old Age. *The Journals of Gerontology: Series B* 61(6): S340–S346.

Age UK (2022) *Poverty in Later Life*. London: Age UK.

Bourdieu P (1984) *Distinction: A Social Critique of the Judgement of Taste*. London: Routledge and Kegan Paul.

Bourdieu P (1986) The forms of capital. In: Richardson JG (ed.) *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood, pp. 241–258.

Brannen J (2005) Mixing methods: The entry of qualitative and quantitative approaches into the research process. *International Journal of Social Research Methodology* 8(3): 173–184.

Broese van Groenou M and van Tilburg T (1997) Changes in the support networks of older adults in the Netherlands. *Journal of Cross-Cultural Gerontology* 12(1): 23–44.

Brown H and Reid K (2021) Navigating infodemics, unlocking social capital and maintaining food security during the COVID-19 first wave in the UK: Older adults' experiences. *International Journal of Environmental Research and Public Health* 18(14): 7220.

Cattell V (2001) Poor people, poor places, and poor health: The mediating role of social networks and social capital. *Social Science & Medicine* 52: 1501–1516.

Coleman J (1998) Social capital in the creation of human capital. *American Journal of Sociology* 94: S95–S120.

Cornwell B and Schafer MH (2016) Social networks in later life. In: George LK and Ferraro KF (eds) *Handbook of Aging and the Social Sciences*. 8th ed. San Diego, CA: Academic Press, pp. 181–201.

Curtis RG, Windsor TD and Luszcz MA (2015) Perceived control moderates the effects of functional limitation on older adults' social activity: Findings from the Australian longitudinal study of ageing. *The Journals of Gerontology: Series B* 72(4): 571–581.

Dean WR, Sharkey JR and Johnson CM (2011) Food insecurity is associated with social capital, perceived personal disparity, and partnership status among older and senior adults in a largely rural area of central Texas. *Journal of Nutrition in Gerontology and Geriatrics* 30(2): 169–186.

Dickinson A, Wills W, Kapetanaki AB, et al. (2021) Food security and food practices in later life: A new model of vulnerability. *Ageing & Society* 42: 2180–2205.

Dickinson A, Wills WJ, Meah A, et al. (2014) Food safety and older people: The Kitchen Life study. *British Journal of Community Nursing* 19(5): 226–232.

Dowler EA and O'Connor D (2012) Rights-based approaches to addressing food poverty and food insecurity in Ireland and UK. *Social Science & Medicine* 74(1): 44–51.

Geithner L and Wagner M (2022) Old-age lifestyles: Patterns of participation in leisure activities and their associations with different forms of capital. *Journal of Aging Studies* 61: 101022.

Kemperman A, van den Berg P, Weijs-Perrée M, et al. (2019) Loneliness of older adults: Social network and the living environment. *International Journal of Environmental Research and Public Health* 16(3): 406.

Kirkby-Geddes E, King N and Bravington A (2013) Social capital and community group participation: Examining 'bridging' and 'bonding' in the context of a Healthy Living Centre in the UK. *Journal of Community & Applied Social Psychology* 23: 271–285.

Kusenbach M (2003) Street phenomenology: The go-along as ethnographic research tool. *Ethnography* 4(3): 455–485.

Martin KS, Rogers BL, Cook JT, et al. (2004) Social capital is associated with decreased risk of hunger. *Social Science & Medicine* 58(12): 2645–2654.

Nahapiet J and Ghoshal S (1998) Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review* 23(2): 242–266.

Newall E, Dewar B, Balaam M, et al. (2006) Cumulative trivia: A holistic conceptualization of the minor problems of ageing. *Primary Health Care Research and Development* 7(4): 331–340.

Nosratabadi S, Khazami N, Abdallah MB, et al. (2020) Social capital contributions to food security: A comprehensive literature review. *Foods* 9(11): 1650.

Office for National Statistics (2021) Excess winter mortality in England and Wales: 2020 to 2021 (provisional) and 2019 to 2020 (final). Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/2021to2022provisionaland2020to2021final

Pantano E, Pizzi G, Scarpi D, et al. (2020) Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak. *Journal of Business Research* 116: 209–213.

Pink S (2007) Walking with video. *Visual Studies* 22(3): 240–252.

Pinto JM and Neri AL (2017) Trajectories of social participation in old age: A systematic literature review. *Revista Brasileira de Geriatria E Gerontologia* 20(2): 259–272.

Putnam R (1995) Bowling alone; America's declining social capital. *Journal of Democracy* 6(1): 65–79.

Putnam R (2000) *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.

Said CM, Batchelor F and Duque G (2020) Physical activity and exercise for older people during and after the coronavirus disease 2019 pandemic: A path to recovery. *Journal of the American Medical Directors Association* 21(7): 977–979.

Schatzki T, Knorr Cetina R and Von Savigny E (2001) *The Practice Turn in Contemporary Theory*. London: Routledge.

Schroder-Butterfill E (2012) The concept of vulnerability and its relationship to frailty. In: Beland F and Michel H (eds) *La Fragilité des Personnes Agées*. Rennes: Presses de L'EHESP, pp. 205–228.

Schroder-Butterfill E and Marianti R (2006) A framework for understanding old-age vulnerabili-
    ties. *Ageing & Society* 26: 9–35.
Slater M (2012) Olympics cycling: Marginal gains underpin Team GB dominance. *BBC Sport*.
    Available at: https://www.bbc.com/sport/olympics/19174302
Thompson C, Hamilton LK, Dickinson A, et al. (2020) The impact of covid-19 and the resulting
    mitigation measures on food and eating in the East of England: Interim report. Available at:
    https://uhra.herts.ac.uk/handle/2299/23118
Tsofliou F, Grammatikopoulou MG, Lumley R, et al. (2020) Effects of lunch club attendance
    on the dietary intake of older adults in the UK: A pilot cross-sectional study. *Nutrition and
    Health* 26(3): 209–214.
Wills W, Meah A, Dickinson A, et al. (2015) 'I don't think I ever had food poisoning': A practice-
    based approach to understanding foodborne disease that originates in the home. *Appetite* 85:
    118–125.
Wills WJA, Meah A, Dickinson F, et al. (2013) *Domestic Kitchen Practices: Findings from the
    'Kitchen Life' Study*. London: Food Standards Agency.
Woolcock M and Narayan D (2000) Social capital: Implications for development theory, research,
    and policy. *The World Bank Research Observer* 15(2): 225–249.

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