RESEARCH ARTICLE

Food for thought: SDG challenges, corporate social responsibility and food shopping in later life [version 1; peer review: 2 approved with reservations]

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Abstract

With the context of changing global and local populations and, for example, their composition and distribution, this paper offers insight to food shopping in later life with a focus on Nottingham and Nottinghamshire in the East Midlands. The work is relevant and important due to the specific population makeup of this area and the challenges in achieving the UN Sustainable Development Goals (SDGs) as a result of population changes/challenges.

The work takes an interdisciplinary view and draws on literature from both social policy and social care and business and marketing. Using this work as a grounding, and insights to primary research from a wider study in this area, the paper offers discussion and comment on:

- The importance of food and food shopping in later life;
- Issues of, and concerns for, health, well-being, identity and community maintenance and resilience (as a direct result of the challenge to SDG achievement);
- The role(s) and responsibility of business from a core business and wider business/corporate responsibility perspective as a reflection of the above and findings of the work.

Using primary research undertaken by the authors, the paper supports findings from existing work from across social policy and care and business and management – related to the practicalities, challenges and the role of and approaches to food shopping in later life. It specifically offers insight to the efforts made by older food shoppers to maintain their independence and support their choices in a context of interdependence (e.g. within a family, community and environment). The importance social aspects of food shopping (as a counter to isolation and loneliness for example) are also identified and how, for example, the actions of business(es) may undermine the
efforts (and resilience) of individuals and communities. ‘Better’ understanding of food shoppers by business and other stakeholders is promoted.

**Keywords**
SDG Challenges, Food shopping in later life, Choices and Independence, Resilience, Business Responsibility/CSR

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**Introduction**

**Context and link to goals and outcomes**

The overall context for this paper is the change to global and local populations (see for example: ONS, 2019 and UN, 2019). Related to these changes, the UN (2019) have identified that issues associated with size, composition and distribution of population are having consequences for the achievement of the Sustainable Development Goals (SDGs). With this context, we focus on food and food shopping in later life and the challenge to SDGs through, for example, the:

- management of health risks and the promotion of inclusion; and
- inclusivity of ‘settlements’ and resilience in structures which underpin human well-being.

Through discussion and comment, we offer insights from social science, business and marketing literature and our own primary research. The latter focussed on the UK and Nottingham and Nottinghamshire in the East Midlands due to convenience and, more importantly, the population makeup of this specific area.

Overall, the work permits the illustration of the role of food and food shopping in later life and, given the SDG challenge noted, questions what this may mean for, for example, various stakeholders. This is necessary because, as we will see from this work, food and food shopping are important considerations in later life for health and quality of life and also individual and community resilience. The latter is particularly important due to the SDG challenge but also as a result of, for example, the food retail market situation in the UK (e.g. KPMG/Ipsos Mori, 2018).

**Literature review**

**Population predictions – overview**

At a time when the UK population is already at its highest level, and it will continue to grow (reaching 72.4 million by 2043 according to predictions, ONS, 2019), it is also ageing (GOIS, 2016; ONS, 2017 and ONS, 2019). According to the ONS (2017), 18% of the population in 2016 was 65 and over and by 2046 this group are expected to make up circa 25% of the UK population. Whilst some headline detail has changed recently, following ONS (2019), the overall prediction remains that those 65 years plus will make up a greater percentage of the UK population in the years to come (1 in 4 by 2050 up from 1 in 5 in 2018). To support the focus of this work, ONS (2018) and ONS (2019) also highlight that the distribution of ageing in the UK is not uniform. Specifically, for example, older age groups make up a greater proportion of populations in costal and rural locations (ONS, 2019) and, related to this and the relevance of this work, the 65 plus age group in the East Midlands is expected to grow by over 20% between 2016 and 2026 (ONS, 2018) at a time when overall population in the area will increase by 6%.

**Health and food in later life**

Looking at the circumstance of those in later life in general and the relationship to food, needs and health, we can observe that there are concerns associated with malnutrition due to changes in biological and physiological factors amongst others (see below).

Wider UK evidence suggests that there are approximately 16% of those aged >65 years and 2% of those aged >85 years classed as malnourished (Ahmed & Haboubi, 2010) - with figures rising dramatically in next 30 years due to the population change(s) highlighted above. Ahmed & Haboubi (2010), identify that studies from developed countries surface the importance of the contextual factors and the living situation of those in later life with: 15% of community/home-bound elderly; 23% to 62% of hospitalized patients; and up to 85% of nursing home residents suffering from malnutrition. Ahmed & Haboubi (2010) conclude that, in addition to medical and psychological causes, there are social reasons too, namely (MTF, 2017 agree):

- poverty and low levels of income;
- loneliness and isolation; and
- challenges related to food shopping and a lack of interest or ability to prepare meals.

**Core challenges – poverty and isolation**

In addition to the direct link between finances and purchase(s), there have been concerns about poverty and health in later life for some time (see for example, Burholt & Windle, 2006; Price, 2007). This concern continues (e.g. McKee & Stuckler, 2013) and exists because, as highlighted by Ahmed & Haboubi (2010) and MTF (2017), low levels of income and poverty through life, and in later life specifically, have a direct impact on physical and on mental health. Also of concern for health, quality of life and policy (nationally and locally), Luanagh & Lawlor (2008) identify, with support from Age UK (2012), that there are various concerns associated with isolation and loneliness. Not only are these important for physical and mental health in their own right, but issues such as (physical) isolation pose problems when it comes to food consumption and food shopping (due to, for example, the provision of, and access to, support and transport; e.g see Victor & Bowling, 2012). Victor & Bowling (2012) go on to identify positive links between physical health and social networks and reduction in loneliness and vice versa too; along with other factors such as change in marital status (Age UK, 2012 concur). Walsh et al. (2016) consider further factors that underpin and support the address of isolation and loneliness linked to exclusion through their conceptual framework. This framework offers a useful ‘lens’ through which to view and interpret exclusion and it recognises: spatial-relational; physical-emotional; community-social; and other dimensions (and sub-dimensions). Importantly, Walsh et al. (2016) specifically highlight the vulnerability of older people when it comes to exclusion, due to these dimensions and also age and the process of ageing too.

**Ageing in place, place and identity**

To address health and quality of life concerns (and isolation and loneliness), there is both policy and literature associated with ‘ageing in place’. This is defined, for example - from Davey et al. (2004, p333) as: ‘remaining living in the community with
some level of independence rather than living in residential care’. The idea is grounded in, and focussed on, supporting individuals and couples to remain in ‘places’ that provide continuity and the ability to connect to, and reside in, a community/place in the long(er) term. The benefits of staying in a community (and ‘in place’), and often in one’s own home, are recognised by Age UK (2012) and Walsh et al. (2016). With links to lower levels of malnutrition noted by Ahmed & Haboubi (2010) above too. The specific importance of housing is discussed by Lawler (2001) and identified as, for example, key to accessing health care, community support and other important resources over time.

Rubinstein (1990) offers comment which is useful to further (and other) relevant insights here – linked to context (and the/an ‘environment’) and an individual’s sense of themselves (and who they are/who they wish to remain as) in later life. In addition to the importance of their ‘journey’ and their physical self (their ‘body’) Rubenstein (1990) connects interpretations of the journey (and the individual—the ‘self’) to the socio-cultural context and environment. Specifically, how it (the environment and place) it is both ordered by the individual and others and, in particular, the important role this (ordering) plays in interpretations of circumstance. With links to decision-making processes and, specifically, choices made and outcomes here too.

Related to ageing in place, Wiles et al. (2012) support these insights through discussion of the importance of an individual’s knowledge of the place and space(s) they inhabit, those (people) within, the connection with their life to this point and their future plans etc. Ageing in place, therefore, connects to the individual’s understanding and sense of a place and this place (specifically) is important for mental and physical well-being and outcomes (Wiles et al., 2012). Wiles et al. (2012), like Rubenstein, 1990, surface that both individual’s and group’s develop, share and use a sense of everyday places (beyond the ‘physical’ to include practices, traditions, social and emotional dimensions and responses etc.). This sense of a place matters and is important to recognise when it comes to, for example, understanding plans and choices of individuals/groups over time and what manifests and results (e.g. when ageing in a place).

Experience, choice(s) and resilience
It is suggested that food shopping is important to context and identity. This is because food shopping is a core day to day activity (related to sustaining oneself on a basic level). Related to shopping Shaw (2010) suggests, it is a social activity and ‘practice’ important to individuals (and groups). The importance goes beyond what is purchased to include the act (and process) of shopping itself. To support, Shaw (2010) identifies that shopping skills, and associated habits and etiquette, are learnt over time through experiences and peers. Behaviour (and experiences and this learning) start early and continue through life and things along the way, such as life transitions and the choices made, present further opportunities to learn and they further impact behaviour(s) too. As Plastow et al. (2015) suggest, this is important because, in support of Rubenstein (1990), there are connections to, for example, the maintenance of identity. In this sense, shopping in general (and specifically food shopping) is grounded in heritage (with potential cultural significance too), matters of age and the process of aging, how people seek to manage this process and also how they maintain the sense of who they are and wish to be (through shopping etc.). Things like the different roles individuals play in a household and the community, the role of those in later life (in a family and community) are also important.

It can be seen that there are also differences when it comes to: if, and to what extent, those in later life choose (and/or prefer) to shop for themselves, their level(s) of independence, dependence and/or interdependence. When investigating this area, Rabiee (2013) found that for some in later life it was about people ‘doing’ independence (and people doing things for themselves) and for others it is about choice and control but the ‘doing’ mattered less if older people felt they were still had a role and were in control. In this sense, and even when not doing things for themselves, people maintained input and agency in decisions, the process and the outcomes (e.g. Burnett, 1996). McKie (1999) in a study of people aged 75 and over living in urban and rural communities in Glasgow and Inverness, found that food (and indeed food shopping) played a key role in the maintenance of independence specifically. Interestingly, McKie (1999) also highlighted that older people managed shopping in imaginative ways to address challenges they faced alongside their need to get to the shops more than once a week (both to reduce the impact of heavy bags but also to support interaction of the house).

From the above, the connection between individuals and their physical, social and emotional context(s) is clear and it is a two way, supportive ‘relationship’. On a basic and wider level, it can be seen that support and resources are important too (as noted by Lawler, 2001 related to, for example, housing and by Walsh et al., 2016 related to transport/services and also other public, community and personal/private ‘infrastructure’ and resources). From literature and policy perspective, and in addition to external resources, the importance of an individual’s inner ‘resource’ (e.g. motivation, knowledge, ways of coping etc.) is a core consideration for ‘resilience’. At the level of an individual, resilience can be regarded as a trait within people or a process linked to the ability to bounce back from or cope with adversity (e.g. Jacelon, 1997). Interestingly, when considering the concept of resilience for/in critical gerontology, Wild et al. (2011) identify that resilience is often considered solely at an individual level. As such it’s a micro issue concerning individual behaviour (and resource) rather than wider aspects (and resource) or change(s) on a neighbourhood or community level. This may be neither appropriate nor useful given where we are according to Wild et al. (2011). Whilst noting the comment factors of ‘risks’, Wild et al. (2011) go on to discuss wider insight to the area including:

- the consideration of economic resilience (individual and community), with links to different ‘capitals’ and resources (e.g. social and physical such as networks, infrastructure etc.),
- influences from environmental and individual factors and resources, a more process-oriented view of an individual and
community’s ability to cope with adverse circumstances, and

• despite the focus on cognitive resources, the need to also consider social aspects/resources and the impact of, for example, family, community and others on resilience practices.

Given this, and the comments on interaction/connection between individuals and their community (in the context of the challenge for SDGs) it will be important to retain focus on individuals and their environment when considering some of the related business literature.

Challenges in understanding older customers

The challenge of understanding older people (in general and as customers) has been discussed for some time (e.g. see Gunter, 1998). To support the nature of the challenge, Madgwick & Ravenscroft (2011) identify that ageing itself (and behaviour as a result) is complex and is influenced by a range of factors and older people are as much different as they are the same (Gunter, 1998 concurs). Mathur & Moschis (1999) recognise this heterogeneity and suggest individuals may age (and behave) in ways not prescribed and development in later life is more fluid. In their work, Mathur & Moschis (1999) identify the importance of, for example, distinctions between a person’s ‘potential’ and ‘actual’ mobility too (e.g. based on resources available and their motivation) and, therefore, their actual choices when selecting where to shop and how, who they shop with and what support is needed and so on. Hare et al. (1999) and McKie (1999) also identify choices and behaviour(s) that may not appear ‘rational’ when looking at, for example, the frequency of shopping. What Hare et al. (1999) and McKie (1999) find is a desire (in older shoppers) to get out the house for most of their week – with food shopping (specifically) seen as a vehicle for this and shopping coming second to meeting friends, networking, fostering relationships etc. The latter is important because, as already noted and supported by Hare et al. (1999) related to food shopping, older people exist in relationships of independence and inter-dependence. In this sense, although family and friends can play a (large or small) part in food shopping, it is likely to be important to recognise an individual’s desire to express their own agency in relation to life and shopping. Plastow et al. (2015), with links to identity etc, and Rabiee (2013) related to independence, agree (as do Madgwick & Ravenscroft, 2011 - related to food shopping specifically). Agency may also come as an expression of the way shoppers have learnt to cope with access (and shop frequency, the use of local shops and connections with friends/family) to enable them to shop (Hare et al., 1999).

Shopping experiences and the older customer

With link to the work of others (e.g. Ahmad, 2002), Hare (2003) clearly argues that a one size fits all view of the older shopper/segment is, as reflected above, neither relevant nor useful. In their work, Hare (2003) seeks to address this and explore the area further. In doing so, Hare (2003) offers a useful illustration of factors connected to food shopping experiences and outcomes (specifically levels of ‘satisfaction’). This illustration/framework has similarities to elements of the framework from Walsh et al. (2016); such as community facilities (e.g. services and amenities), accessibility elements (e.g. linked to transport), resources (e.g. household budget) etc. This is not surprising as, in addition to specific older shopper insights, the work of Hare (2003) and others (e.g. Meneely et al., 2008 and Meneely et al., 2009; and Westlake, 1995) was grounded in concerns related to potential exclusion and disadvantage for older shoppers. This potential disadvantage coming from, and around the time of the work, market/industry factors and, for example, the dominance of multiples/larger retailers. This caused issues and concerns for access (linked to the movement of stores ‘out of town’ to other, internal, considerations too – e.g. design/layout of stores). When focussing on the move out of town, Meneely et al. (2008) identified the importance of the 60-plus segment of the population (e.g. to retailers). As well as finding some recognition of these needs and the importance of the group by retailers Meneely et al. (2008) found very little work (by retailers) related to apparently address (or better understand) their requirements (with links to experiences and satisfaction).

Both Hare (2003) and Meneely et al. (2009) offer insights which support the importance of, for example, product and internal store purchase processes (e.g. quantities, price, staff support, size of store, etc.) with a link to wider experience elements too (e.g. support to get to store etc.). Pettigrew et al. (2005), specifically support the importance of staff and concerns with equipment in their ‘big 3’ issues for food shopping in later life. Whilst this and other work is all important and interesting, when it comes to understanding in-store and ‘core’ shopping experience considerations (with some recognition of the role of food shopping, for example, social interaction etc.), it does not, necessarily, offer wider and deeper insight.

Grzeskowiak et al. (2016) support when recently seeking to explore the link between shopping experience and life-satisfaction. With shopping considered an important activity because it helps consumers solve problems (e.g. through purchases). As a result, Grzeskowiak et al. (2016) argued that there should be wider engagement with the ‘problem solving’ view and related connection to life experience and not simply the experience in-store or the core element of the activity and experience. This wider view is supported by the earlier discussion and, in more recent work, Pettigrew et al. (2017) agree. In doing so, Pettigrew et al. (2017) suggest a move away from (apparently) dominant thinking which focusses too much, and too simplistically, on functional aspects of food shopping (such as layout). Pettigrew et al. (2017) identify the need to evaluate the specific value placed on food/food shopping in later life and, like Collins & Brogue (2015) for example, propose retailers have a role to play too.

Older customers and the role/responsibility of business(es)?

The changing nature of the population, the importance of those in later life and the challenges to experience and satisfaction noted above should, from a basic business perspective, be of commercial interest. With businesses (and food retailers) engaging older people’s requirements (and what they value about shopping) because it makes business ‘sense’. Food retailers
specifically should also be further interested because of recent concerns with and changes in their market (e.g. KPMG/Ipsos Mori, 2018, McKinsey, 2018; Mintel, 2017 and Mintel, 2019). Johnson (1990) and Ahmad (2002) support the importance of older customers and Ahmad (2002) suggests that, at the time, retailers had failed to recognise the power and influence of those in later life (as customers who matter); noting further that organisations (apparently) had not targeted older customers differently to younger shoppers (despite the many and various differences identified and also acknowledged by business). Gupta (2016/17) more recently agrees and goes on to identify that older customers are considered the least well understood ‘segment’ despite the likely impact of individual customers and the segment in general.

When it comes to questions of the role and ‘responsibility’ of business specifically and more broadly, it is often cited that Milton Friedman (1962) said “there is one and only one social responsibility of business-to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game...” This statement and its interpretation have, for some time, been held as a ‘way forward’. Although there is also debate about the Friedman’s meaning (see for example, Nilsson & Robinson, 2017) there is no doubt that the profit(s) motive is at the core of the statement. This is, for most businesses, critical but there is a (potentially) wider frame of reference here too (with the notion of ‘staying within the rules of the game’). Carroll (1991) took this debate and discussion further when considering and addressing the moral management of stakeholders (beyond the simple shareholder and profit view). More recently still, Porter & Kramer (2011) moved to propose the notion of shared value to address concerns about business profitability at the expense of stakeholders and specifically communities (with the importance of communities both key to the SDGs and resilience already noted). According to Porter & Kramer (2011), the concern(s) for communities came as a result of the narrow focus on (financial) value creation and the failure to recognise (and understand customer interest in) environmental degradation and the well-being of communities (and those within). In this sense ‘corporate responsibility’ is more than business having regard for shareholders and profit(s) and wider social issues - it is also beyond just notions of philanthropy or simple sustainable business too. This regard for the social (and better understanding customers, their requirements and what they value in the context of their communities and places) is suggested to be good business (Porter & Kramer, 2011). And it is about developing new approaches to business and a deeper appreciation of the needs not only of society (and customers) but of businesses themselves too (Porter & Kramer, 2011).

This is, therefore, important for this work because of the role of food shopping (for individual quality of life) and also for communities in which business(es) play a role; a role from which they can and do benefit (along with others).

Research methodology
Overall research design and approach
The primary research used here to illustrate the shopping habits and behaviour of those in later life and current ‘practice’ comes from a project planned and phased over a number of years.

The design of the overall research (and associated project) permitted the use of different approaches to information and data collection to explore the role and importance of food shopping from the perspective of those in later life. The approach and design also allowed the researchers to take into account of literature from different disciplines (e.g. social policy to start and then, as the work and insights unfolded, business and marketing) and, more recently, the views and perspectives of a small number of stakeholders (e.g. interest and support groups and, important for this work and the discussion etc. within, retailers). The research was phased and structured as noted below with comments on, for example, response rates to support:

Phase 1. Exploratory phase
This phase focussed on generating rich insights to, for example, the role, experience and value of food shopping in later life and, for example, factors that supported or constrained food shopping. Consisted of two focus groups and 25 semi-structured interviews (30 minutes to 1 hour each). All interviews and focus groups were undertaken by Dr Towers, an experienced Senior Lecturer in the School of Social Sciences at Nottingham Trent University and a researcher with, for example, a Post Graduate qualification in Social Science Research Methods. Participants in both focus groups and interviews were provided an overview of the project and insight to the researcher and their interest in this area prior to their involvement in the project. This awareness raising was achieved as contact was established via four local sector networking and representative groups whose members and the individuals they had contact with covered various locations across Nottingham and Nottinghamshire (an example of these groups is Nottingham Elders Forum, a charity established in 2005, which works to improve the lives of older people across the Nottingham City area). The final self-selected and voluntary sample was varied in terms of their location (city, suburban and rural/village), age and household profile. The gender split for the interviews was 20 women and five men from the total of 25 interviews; this introduced some potential bias which was noted by the researcher. Interviews took place in a mix of mutually agreed public and private locations (with care and/or support workers present where requested and/or necessary) and, like the focus groups which were arranged in local public spaces (village halls), tape recordings were made to support data/information capture and transcription. Recordings were deleted (as per ethical approval requirements and consent – see below) once they had been transcribed. All participants were anonymised and no identifiable details were retained within the transcripts (all transcripts were stored on a password protected computer). The flow and structure of the interviews were guided by question prompts informed by the overall research aims and objectives (see Extended data (Towers & Howarth, 2020)). The subsequent focus groups used the same overall question prompts to support consistency with some following through of discussion(s) by Dr Towers based on initial insights from the interviews. Following the project’s intention at this point, exploring this area further, interview and focus group transcripts were physically coded by Dr Towers using the themes that emerged in/through the responses within. Current social policy literature was used to ground and further delineate, and where possible underpin, the themes that were identified. All evaluation of the qualitative data was undertaken by Dr Towers.
Phase 2. Exploratory/descriptive phase
Building on Phase 1, themes and insights were used to design a self-completed questionnaire (see Extended data (Towers & Howarth, 2020)). In addition to Phase 1 outcomes, the questionnaire content was grounded themes related to social policy literature. 2000 hard copy self-completion questionnaires were distributed via 60 Nottinghamshire County libraries. 475 responses were received by Dr Towers using the postage paid return envelope (no returned responses were excluded – this was a response rate of circa 24% from the questionnaires distributed). Circa. 73% of respondents were female, 25% of the respondents were male (a similar split in response to interviews) and circa. 60% lived in urban/semi-urban areas. Table 1 shows how responders were distributed across, and within, age brackets.

| Age bracket       | Overall | Female | Male  | NK |
|-------------------|---------|--------|-------|----|
| 61–70 years       | 29%     | 72%    | 27%   | 1% |
| 71–80 years       | 35%     | 77%    | 22%   | 1% |
| 81–90 years       | 19%     | 77%    | 20%   | 3% |
| 51–60 & 91 years plus | 17% | 63%    | 27%   | 0% |

NK, not known.

Phase 3. Interdisciplinary phase
This involved an extension of literature base (to include business and marketing literature) and re-review of findings to further explore and ground the primary research from Phases 1 and 2. This phased also included dissemination and discussion of findings and insights with local authority and support/interest group representatives and selected retailers. The first part of this phase was formed around two presentations which provided an overview of the project and its findings at two separate meetings with representatives of two food retail organisations. These meetings took place in March and June 2018 with a Store Manager and an Area Manager contacted directly by the authors because of their individual roles (and thus professional insight to the area) and the relevance of their respective organisations to food shoppers in later life (as identified by the research). A PowerPoint presentation (in hard copy) was used to share findings and insights at these meetings. This input was followed by questions and discussion and a chance for the individuals to feedback on the work to this point. Using the same PowerPoint materials, these individual meetings were followed by a more formal presentation of the project and its summary findings to a meeting of the Nottinghamshire Ageing Well and Older Persons Advisory Group held on 17th September 2018 in Sutton in Ashfield by the authors. Of benefit for the work, and the further grounding of its findings and insights, this group (and the meeting) was composed of individuals who were in later life themselves, representatives of organisations who work with and support those in later life (public and private sector) and those with an interest in improvements to the lives of people in later life. The sharing of the findings and outcomes via the ‘presentations’, and the associated question and answer sessions, facilitated direct feedback on the project and its outcomes and review from both relevant and qualified practitioners and peers of the participants too. These presentations and the associated feedback (although not formally documented) were of value to the work and the overall sense-checking of the findings and insights developed in Phase 1 and Phase 2 of the work. This work was supplemented by the extension of the underpinning literature to include business and marketing theory in addition to literature and theory from social policy.

An example of the value of the literature review extension came following insights to the work from, for example, Hare (2003) who had identified a range of factors that influenced older food shopper experience(s) – with similarities to the work of Walsh et al. (2016) as noted earlier. However, these factors (value of shopping to those later in life) appear not to have been further explored in much of the business/marketing specific literature despite more recent calls from, for example, Pettigrew et al. (2017). The potential link here to (food retail) business(es), corporate social responsibility, individual health/well-being and individual and community resilience offers further interest too.

Ethical statement
Phase 1 of the Food Shopping in Later Life project received ethical approval from the College Research Ethics Committee (CREC) at Nottingham Trent University in September 2014 (No. 2014/21). Phase 2 subsequently gained approval via CREC on 17 February 2016 (No. 2016/28). In Phase 1, participants were contacted via local networking and support groups (such as the Nottingham Elders Forum) as identified previously. Having been provided an overview of the project through this process individuals self-selected and volunteered to participate. These individuals were subsequently provided an overview of the Food Shopping in Later Life project and their role in person and face to face with the researcher (Dr Towers) prior to the respective interviews and focus groups. Written consent forms were used to support the briefing and the provision and documentation of individual informed consent. Audio recordings, contained within the consent, were used to support information capture and destroyed once interviews and focus groups were transcribed by the researcher. In Phase 2, questionnaires were distributed in hard copy, with agreement with Nottinghamshire County
Council, to 60 libraries around the county. A statement on the first page of the questionnaire provides an overview of the project and the role of participants, provision was also made for individuals to withdraw their response(s) and questionnaire submission and full contact details for the researcher were provided to support this process.

**Findings**
This section provides an overview and brief discussion of selected outcomes to support the illustration of findings and insights.

**Overarching insight(s) with grounding in phases and themes**
In addition to overall insights gained through Phase 1, two particular case stories/examples were developed and were useful in illustrating themes and more specific insights. **Box 1** shows a summary of the two case stories/examples of Madeleine (female, 80 years, living in semi-urban area, near city) and Dave (male, 75 years, living in semi-urban area, near city):

**Box 1. Summary of the insights from two case stories**
Both Madeleine and Dave valued food shopping but related to it in slightly different ways. For Madeleine it was a social event but for Dave it was less of that and more of a necessary task. Madeleine shopped primarily for herself whilst Dave shopped for himself and others.

Both rejected the internet but for different reasons. For Madeleine the internet lacked the social aspect but for Dave he could not find bargains and offers via that means of shopping.

For Dave food shopping was about interdependence with others whilst Madeleine saw others as potentially important, but she was the main focus and resource.

Madeleine saw food shopping as an expression of independence, for Dave it was important to him as part of a wider network and his place within. Retirement was critical for Dave as he then saw his ‘job’ as food shopping, whilst for Madeleine retirement meant fewer social networks/less interaction and more isolation. Although Dave did not experience loneliness, he did acknowledge that food shopping could help to off-set it.

Dave did not stress the importance of food shopping as a social event as he shopped for others and the impression was that he was part of a much wider network of family and was less isolated than Madeleine who needed social aspects to make up for diminished social networks.

The above and other elements were evident in all interviews and focus groups under the themes:
- Practicalities (including access/accessibility, product elements, facilities etc.)
- Independence (including choice and agency)
- Interdependence (with links above)
- Food shopping (specifically) as a social activity (with links to, for example, loneliness/isolation)

Brief summaries of the combined insights (from Phases 1 and 2 of the work) were:

**Practicalities** – for most there were practicalities to consider when it came to food shopping. These included access to stores – specifically the use of cars and the availability of buses (see comment in this area later too) and, for example and possibly surprising, the (apparent) lack of impact from the weather and other similar challenges (although icy pavements were noted). The clarity of food labels, portion sizes and the nature of offers (lower prices for buying more) were also highlighted as concerns. All these were connected to product and purchase practicalities and arose, for most, due to things like household circumstance and finances. Other, in-store, practicalities that were surfaced and identified included access to toilets and chairs (to sit down on whilst in store). These were important for the majority and, as one may imagine, became increasingly a concern with age (specifically for those 80 years plus). Despite the evidence and impact(s) of practicalities, and linked to things such as planning, the frequency of shopping and also evidence of what was seen as ‘resilience’, most brought shopping home for themselves and overcame what were seen as core challenges here.

These findings led to insights related to motivation, the ‘strategic’ nature of, and approach to, planning food shopping trips and resilience. This was important day to day and week by week but also over time too. For some, for example, planning on where to live in later life before it was deemed to be too late was a clear consideration along with awareness of resource(s) etc.

It was important to note that this work found clear evidence of the rejection of on-line food shopping and self-service check-outs. Rejection as both these areas were discounted, despite their potential importance for retailers and other customer segments (and their potential value to those in later life, like others, due to, for example, convenience and efficiency). This was because, for older shoppers, things like self-service check-outs and online food shopping were seen as things to avoid rather than engage. This meant that certain stores would not be visited (due to the prevalence of self-service check-outs) and, whilst the option of online shopping was noted, it was discounted as an option. This rejection came, not because of the challenge of using (for example, self-service check-out) or lack of technology, but rather because these tools/options simply did not provide the (wider) solution and benefit that older shoppers sought when food shopping. Specifically, things like social interaction, the importance of choices, and demonstration of independence, for example, all of which came with/from food shopping.

**Independence** – adding to practicalities and getting to store, it was identified that most respondents travelled to the food store themselves (many with trolleys as necessary). In addition to getting to store, independence was expressed in different but similar ways and meant choice, control and agency. In the work, there was little discernable difference in this area between: men and women; those who lived in rural or city locations; and
those of varying ages from 50s to in their 90s. Core here was the demonstration of the ability to ‘do it’ (food shopping - physically and otherwise). The importance is illustrated with one interviewee’s comment: “if you hand over shopping to someone else you’re handing over issues related to the quality of what you eat”. This, and the wider findings, offered insight to the importance selecting (and choosing) specific items and also the role of food shopping as an expression of independence and something that supported the maintenance of identity (this is who I am) too.

When it came to ‘choice(s)’ – there was clear support for the importance of making decisions for oneself with the majority of respondents asserting that they made food shopping decisions (although they did not always shop alone). However, taking or keeping control was important to the clear majority and the importance of choice and control does not really decline as people age (all age groups were clear in their agreement with the importance of taking and maintaining control over what was bought etc.). As one may imagine, as was the case with practical aspects such as toilets and chairs around the store as people age, the importance of retrieving food items from shelves for oneself (an expression of control and choice) declined with age.

The findings overall here supported a link between choice and agency and also further insight into the rejection of online food shopping (as it did not add/support value and satisfaction in the food shopping experience). Specifically (and in addition to not accessing offers as highlighted by ‘Dave’ above), most respondents identified the preference for choosing food for themselves (or other reasons), rather than a lack of access to technology or knowledge of how to use a computer, as further explanation of why they did not engage, for example, online shopping.

**Interdependence** – interdependence included, for example, the/a reliance on others to support independence or, as was the case with Dave, the reliance of others on him in his ‘role/job’ as food shopper for the family. However, as identified with Dave and others, these themes were also about belonging and one’s ‘place’ in a family and/or a community/place. Most relied on, or were relied upon (fewer), by near family (sons/daughters) or extended family (grandchildren) and sometime those beyond (neighbours). Support was not/others were not always present though because supporters and others in the community were not always available or they had been brought up to do their own thing(s). Linked to the above, and the notion of agency, whilst many relied on support (or offers of support), it was important for those in later life to retained control (e.g. timing of the trip, location, actual decisions and choices in-store as noted above).

Most suggested they themselves were the most important and they relied on themselves first. It was noted that the situation here was actually complex (with links to resources, such as cars etc.). and in all settings the relationship(s), and the boundaries between interdependence and independence (and control), were not always clear and easy to pin down exactly. Interestingly it was identified, as one may expect related to potential isolation and exclusion (but as a counter to this), those in a rural environment relied more on others in the community for support (including support with food shopping). With social/economic links too, the rural locations included were often villages where people had moved to work. This reliance could, therefore, be linked to the working experience (in mining) and the nature of (that) work too. However, it is noted that these villages also have a higher proportion of older people despite some recent change(s) and this could well be an influencing/contextual factor. Those in sub-urban areas felt the most isolated and less ‘knit’ together. This was mostly as a result of the lower population density of these areas (compared to urban areas) but also linked to changes to the areas (for example, new development and other changes) and impact(s) that come as one ages (e.g. the passing of friends/family, their moving away, changes in pursuits etc.). The link to ‘ageing in place’, exclusion and resilience (individual and community) was noted here. This was because, and although individuals evidence a deal of resilience (with support from their own resource, planning and motivation) other internal (interests etc.) and external (e.g. facilities, services, opportunities and other relational resources and considerations).

**Social activity (and loneliness)** – this was an interesting and important area as a good majority of those interviewed saw shopping as a means/vehicle for interaction whether they planned to meet people or not. The social aspect here coming whilst on the way to, or from, shops, whilst in the shop (or in store or other café etc.) or whilst out and about engaged in shopping (bumping into people the responders already knew or others etc.). Responses to the questionnaire, whilst more evenly distributed overall, supported the importance of shopping (and food shopping specifically) as a social activity too. What was also important from the all the work was the increasing importance of food shopping in later life as important to social activity (and to counter loneliness specifically) with age. Interesting (and important) too, were the clear differences when it came to gender and age and the social importance of food shopping. Some of this was linked to ‘roles’ in earlier life but also because of current circumstance(s). This meant that overall, the women in the interviews and survey (as was evidenced in the case examples of Madeleine and Dave) identified the social activity importance of food shopping more (and more importantly) than the men. This outcome was not simply the product of the larger number of women who took part in Phases 1 and 2 – rather, there was a clear difference between women and men when it came to the social (networking and interaction) importance of food shopping in later life. It is also noted that although that aspect of food shopping was un-important to men, its role and importance increased with age in men too (due to life stage and circumstance etc.). However, the social aspect of shopping was more important to women.

Following this it was noted that, for many, food shopping was unique and quite different from other forms of shopping; it was this activity (food shopping) that meant something more, this was social, this was an ‘event’ unlike other forms of
shopping. For some, the interaction was with family (as part of a rotating responsibility for food shopping) and, for others, interaction was with others (e.g. in the café at the store or elsewhere). The social aspect of food shopping was linked by most as a counter to loneliness and, potential, isolation/exclusion and regular shopping resulted from the opportunity to socialise as well as practical challenges (e.g. getting around store, retrieving and dealing with items/products, carrying bags etc.). Social interaction, linked to ageing and the move from work(ing), also saw impact here too. It was also noted that food shopping in later life was different and, for most, more enjoyable than before (retirement etc.), when it was more a practicality and ‘chore’. As such, in many ways, this illustrates the changing place of food shopping in later life (specifically) and also the nature of the activity (and activities associated with it). As such, with links to things such as retirement, and underpinned by independence (and the assertion of the individual, their self and their choices) and linked to interdependence (and the role and ‘location’ of the individual in their community, family etc.), food shopping’s role, and importantly its ‘value’ beyond simple provisioning, was observed to change (and have changed) in later life and again with age/age.

Discussion, comment and observations
At a core level the findings from this work support the work, findings and assertions of others and, for example, it underpins the overall importance of food shopping to health, well-being and quality of life. The importance here is at the core level of providing provisions for cooking and life but also, and importantly, at a wider level too.

From the perspective of the literature this is important as, for example, Ahmad (2002) and Meneely et al. (2008) identify concerns with the quantity and quality of work in this area. These concerns are reinforced and extended more recently by Pettigrew et al. (2017 – and also Grzeskowiak et al., 2016), despite intervening work and insights from, for example, some of the same authors (e.g. Pettigrew et al., 2005). The challenge from this recent work and literature being the need/requirement to consider the wider context, consideration(s) and meaning of food shopping in later life. This is particularly important to insights in this important area but also because earlier business/marketing literature (e.g. Hare, 2003) already started to offer some insight to wider factors that affecting food shopping satisfaction in later life – insights which appear not to have been taken forward. When considering more recent insights from social policy and gerontology studies we can support (and extend) the importance of work, and a wider view, too. Specifically, when it comes to core areas relevant to the achievement of SDGs (noted earlier) such as exclusion and isolation (e.g. Walsh et al., 2016) and work related to resilience beyond the core individual resource(s) (e.g. Wild et al., 2011).

Given the challenge to the SDGs from population change(s) as noted by the UN (2019) and the importance of older customers and food shoppers (e.g. to business/retailers – Gupta, 2016/17), it would seem relevant (and important) to follow up some of the insights from this work. Not least because the findings start to offer some wider insight into the importance of individual and community resources and services and the role(s) and responsibilities of business(es) too. For example, when it comes to the recognition and needs (and preferences) of older food shoppers whilst engaging in activity in this area. This would appear on a base level to make business sense given the increasing size (and importance) of the older food shopper population. Without this recognition (which appears to be the case following discussion with retailers in Phase 3 of this work) changing business practices (e.g. in pursuit of efficiency and/or the needs of other customer groups/segments) could have serious impacts on older food shopper activity/behaviour (with impacts on health and well-being as a result). With impact for individual food shopper and their community’s (and wider community) resilience as a result.

The latter is particularly relevant given the work of, for example: Rabiee (2013) when it comes to the role and importance independence and choices in later life; Victor & Bowling (2012) when it comes to the benefits of social networking, health and wellbeing etc; and, for example, the work of Rubinstein (1990), Plastow et al. (2015) and Wiles et al. (2012) when it comes to identity and identity maintenance and the connection(s) to place (and place as a resource).

Having said this, it could also be suggested that one cannot expect business to be in tune with what may be seen as a social issue, but greater awareness of these deeper realities would, for example, help retailers to ‘know’ their market better (and have clearer insight to the potential implications of changes/‘improvements’ they make). This is important for business/retailers and other stakeholders as older people clearly have a desire to take, and/or maintain, control of their lives and their options (and their identities) when shopping. To do this, they need the means and resources to able to do so. As such, and whilst older food shoppers can (and do) show individual resilience (and this work offers insight into this and the efforts they make when continuing to food shop and the benefits gained), their efforts may be constrained or thwarted without local and appropriate ‘resources’ to both support and maintain their resilience in context. In this sense, older food shoppers need to be able to access food stores and have a shopping experience that responds to their functional, dietary and wider social interaction needs. This is particularly important as, for those in later life, the food shopping experience appears to be more than a just a functional necessity, but it is vital to social (and wider) purposes and needs.

Looking to the future one can highlight the benefits, and greater need, for joint (and interdisciplinary) research into this area. By bringing together business/marketing and social policy/care insights, different perspectives on core SDG challenges can be offered and the needs/requirements of the market (and customers) better understood. This research has unearthed some important findings but more needs to be done to address these issues and concerns, with wider recognition of the issues amongst retailers and other stakeholders too.
Whilst this research has started with liaison with retail, it can now go further to investigate how retail (with links to responsibilities and role in context) and social policy/care too can respond to these needs. It may be that there is a need for more direct links between social policy and care planners and businesses/retailers in ‘the market’. This work would need to include those with responsibility for transport to stores too as, although a wider view is needed, practicalities (of access etc.) are still important. There are good business and a strong ethical case for such forward thinking, with the need for all age food retailers that acknowledge that shopping for food is more than transactional and practical - it is social and experiential and that this applies across the life course but particularly in later years. And this brings, potentially, wider roles and responsibilities at the local level to support shoppers and their communities.

## Data availability

### Underlying data

**UK Data Service:** Food shopping in later life in Nottingham and Nottinghamshire 2014 – 2016. [https://dx.doi.org/10.5255/UKDA-SN-854430](https://dx.doi.org/10.5255/UKDA-SN-854430) (Towers & Howarth, 2020).

This project contains the following underlying data:
- Transcripts from 25 individual interviews
- Transcripts from two focus groups
- Excel spreadsheet containing data/information transposed from 474 questionnaires

## Extended data

**UK Data Service:** Food shopping in later life in Nottingham and Nottinghamshire 2014 – 2016. [https://dx.doi.org/10.5255/UKDA-SN-854430](https://dx.doi.org/10.5255/UKDA-SN-854430) (Towers & Howarth, 2020).

This project contains the following extended data:
- Copy of interview guide
- Copy of questionnaire
- Copies of consent forms

Data cannot be made publicly available it is not possible to ensure full de-identification of transcript data. However, data are available for research purposes to users registered with the UK Data Service. Commercial use of the data is not permitted as participants and network organisations were informed that data would not be shared with retailers. Information on how to register with UK Data Service and terms of access can be found at [https://www.ukdataservice.ac.uk/get-data/how-to-access.aspx](https://www.ukdataservice.ac.uk/get-data/how-to-access.aspx).

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Cecilia Casalegno
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Chiara Civera
Department of Management, University of Turin, Torino, Italy

Thanks for the opportunity to review this paper, which presents interesting food for thought. We believe it is of interest to both academics and professionals to be able to link the consumption of food in later life and the resilience of the community, which appear to be overlooked by the literature so far.

Nevertheless, we would like to outline some criticalities, which, if clarified and adjusted, can contribute to increase the replicability of the study and its theoretical impacts. Our first concern is about the introductory part of the paper, which, unfortunately does not say much about the study purpose and the links between different theories and constructs that the authors discuss later in the paper, such as corporate social responsibility, sustainability, SDGs, community resilience, food consumption. What is it that the authors intend to study? What is the novelty of this research in terms of impacts on sustainability? What is the impact on SDGs? Why do you mention CSR without appropriately giving it a theoretical placement within the study? Please, specify all these matters in the introduction: it would make the reading of this paper easier and it will take the reader straight to the point. We also suggest to better place the study into a theoretical perspective or framework and outline what is the literature gap that the authors intend to cover. Indeed, the authors state “we focus on food and food shopping in later life and the challenge to SDGs through, for example, the: • management of health risks and the promotion of inclusion; and; • inclusivity of ‘settlements’ and resilience in structures which underpin human well-being.”, but they do not explain this further.

The reader is discovering this link little by little but concepts need to be further analyzed to posit more solid conclusions and especially linked to a specific theoretical area (Are the authors contributing to the marketing field? (since they focus on consumption trend and perception) or are they suggesting new perspectives for SDGs accomplishment? Please, we kindly ask the authors to specify and discuss this.
Furthermore, it would strengthen the replicability of the study if the authors specified the contents and provided traces of the interviews, questionnaires and focus groups. What have they asked? Why? How did they build the questionnaire? These questions are crucial for linking theory and practice even when the authors discuss the results.

Eventually, the title presents the link between food shopping in later life and resilience and SDGs: if at some point the literature review clarifies why the authors consider such a shopping as an issue linked to resilience, it is unclear, however, the link between the area of investigation of this paper and the SDGs. Which SDGs are we referring to? Which sub-goals in particular? Another suggestion is to specify this aspect because otherwise we risk falling back into the vague. We wish the authors luck on their research.

**Is the work clearly and accurately presented and does it cite the current literature?**
Partly

**Is the study design appropriate and is the work technically sound?**
Yes

**Are sufficient details of methods and analysis provided to allow replication by others?**
Partly

**If applicable, is the statistical analysis and its interpretation appropriate?**
I cannot comment. A qualified statistician is required.

**Are all the source data underlying the results available to ensure full reproducibility?**
Partly

**Are the conclusions drawn adequately supported by the results?**
Yes

**Is the argument information presented in such a way that it can be understood by a non-academic audience?**
Yes

**Does the piece present solutions to actual real world challenges?**
Yes

**Is real-world evidence provided to support any conclusions made?**
Yes

**Could any solutions being offered be effectively implemented in practice?**
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Cecilia Casalegno: I'm a professor of Marketing, Communication, human
resource management. Chiara Civera: I'm a professor of Marketing and Business ethics

We confirm that we have read this submission and believe that we have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however we have significant reservations, as outlined above.

Reviewer Report 15 February 2021

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Renata Benda-Prokeinova

Department of Statistics and Operations Research, Faculty of Economic and Management, Slovak University of Agriculture, Nitra, Slovakia

First the topic of the post. Why is corporate social responsibility the content? I did not find any information about the CAP in the findings. Your contribution is mainly focused on the behavior of a consumer at a later age who buys food. The review of the literature is well processed. I have no reservations about the darkness. Indicate in the methodology the tools with which you obtained the data. It includes an interview, focus group and questionnaire. All this is actually the material of work, they are your primary sources. For such a large number of tools, I think it is difficult to present the results briefly. It would be appropriate to focus in the article only on the output of one of the data acquisition tools. Here I come to the point that I do not know what was actually the content of the interview, focus group and questionnaire. Here is the moment where I had a problem repeating your research. The second part of this chapter should be adequate statistical methods. In the article I miss any statistical method, resp. presentation of the results of statistical methods. I expected the text mining outputs during the intervention and focus group. The questionnaire can be analyzed by a wide range of non-parametric methods due to the nature of the questions. I consider this part of your work to be a weakness of your work, even though the results look interesting. But you probably wrote them by hand and then reduced them to an intelligible form. Even in this case, there is a loss of information from your conversations.

Is the work clearly and accurately presented and does it cite the current literature?
Yes

Is the study design appropriate and is the work technically sound?
Yes

Are sufficient details of methods and analysis provided to allow replication by others?
Partly

If applicable, is the statistical analysis and its interpretation appropriate?
I cannot comment. A qualified statistician is required.

Are all the source data underlying the results available to ensure full reproducibility?
Partly

Are the conclusions drawn adequately supported by the results?
Yes

Is the argument information presented in such a way that it can be understood by a non-academic audience?
Yes

Does the piece present solutions to actual real world challenges?
Yes

Is real-world evidence provided to support any conclusions made?
Yes

Could any solutions being offered be effectively implemented in practice?
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: My research topic of interest is sustainable consumption, mainly food consumption. At the same time, I work at the Department of Statistics and Operations Research and have been analyzing questionnaires since 2005. For the last 5 years, we have expanded our teaching to data mining and data science. Cooperate with my colleagues on the international research projects and my part of the projects is methodology and statistics analysis.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.