



Measuring Later Life Social Exclusion in Understanding Society

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MEASURING LATER LIFE SOCIAL EXCLUSION IN UNDERSTANDING SOCIETY

Working paper

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International Centre for
LIFECOURSE STUDIES IN SOCIETY AND HEALTH



In collaboration with CFAS Wales

Measuring Later Life Social Exclusion in Understanding Society

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A working framework for social exclusion in later life

A key challenge to understanding social exclusion is how it is operationalized. Social exclusion itself is not directly measurable, but its existence is evident by the occurrence of other phenomena that act as indicators. Across the literature there are a number of domains repeatedly used in conceptual frameworks of social exclusion, which we have grouped into seven overarching domains, defined in table 1. These domains include: service provision and access; social relations and resources; civic participation; economic, financial and material resources; environment and neighbourhood; health and wellbeing; and discrimination. Whilst there may be similarities in the conceptual frameworks of social exclusion across studies, the way in which these are operationalized varies, and is often dependent on the measures available in the dataset being used, and the sample population. For example, people's needs change with age and consequently the indicators used in the operationalization of social exclusion will also change. Indicators of exclusion on the economic domain may include being in education, training or paid work for children and working age adults, but for older adults the focus is more likely to be on savings and current material resources (Levitas, 2007).

Social exclusion is widely acknowledged to be a dynamic and multidimensional process, which is interactive in nature. Each domain has the potential to be a determinant, indicator, or outcome of social exclusion, which makes it difficult to disentangle the pathways through which social exclusion exists. Few studies have tried to examine the details of these interactions, and without a comprehensive knowledge of the relationships between domains our understanding of the social exclusion process is severely limited.

In order to examine interactions between different dimensions of social exclusion we construct a working framework of *individual* social exclusion from which to directly examine some of these relationships (figure 1). To enable hypothesis testing it is important to separate out determinants from indicators of exclusion and to this end we conceptualise social exclusion as reflecting the three domains of service provision and access; social relations and resources; and civic participation. We reject the economic domain as an indicator of social exclusion because of the need for conceptual clarity between exclusion and poverty, concepts that are often conflated in the literature (Burchardt, Le Grand & Piachaud, 2002). However, we do continue to view economic exclusion as a determinant.

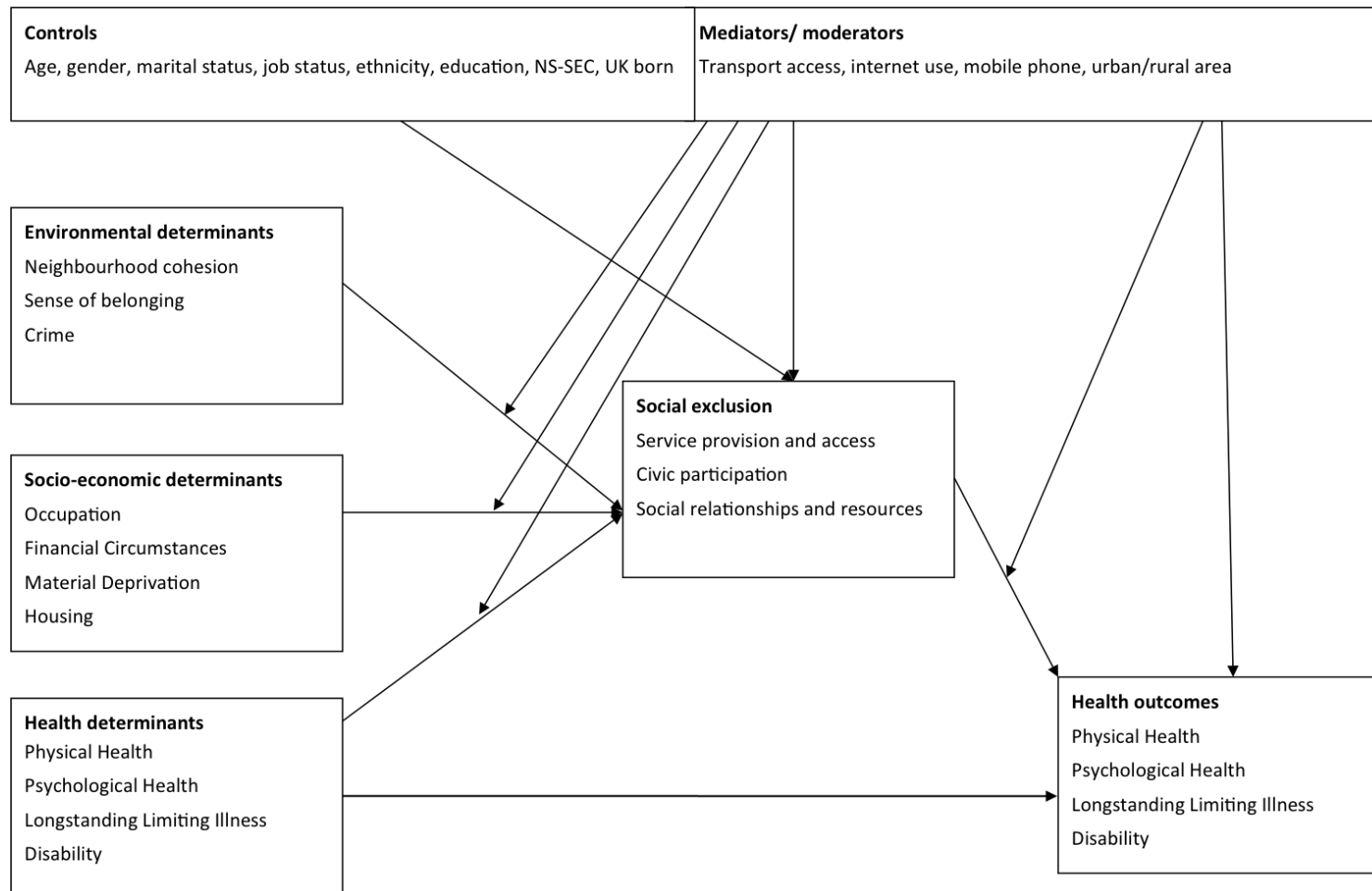


Figure 1. Illustration of a working framework of social exclusion in later life. Social exclusion is measured through three domains: service provision and access; civic participation; and social relationships and resources. The domains of environment, socio-economic exclusion, and health are all considered to be determinants of social exclusion, with health also considered an outcome. Discrimination is assumed to run through all domains and is therefore captured within them, rather than being represented as a domain in its own right.

We also consider environment and neighbourhood to be a determinant rather than an indicator of social exclusion, because of the comparatively static nature of this domain. We consider the domain of health and wellbeing to be both a determinant and an outcome of social exclusion, rather than an indicator, with existing evidence showing that poor health and limiting longstanding illness is associated with increased risk of social exclusion (Scharf et al., 2005; Barnes et al., 2006; Becker & Boreham, 2009; Kneale 2012), and that socio-economic indicators, social resources (Grundy et al., 2003) and social participation (Leone et al., 2016) are associated with health outcomes. Finally, the domain of discrimination and aging is composed of symbolic and identity exclusion (identified by Guberman & Lavoie, 2004), which we consider to run through each of the other domains, operating in a similar way to demographic trends, labour market status, and social policy factors. We therefore do not include discrimination and ageing as a specific dimension in our working framework.

Measuring social exclusion in Understanding Society

Understanding Society - the UK Household Longitudinal Study (University of Essex) is an on-going nationally representative longitudinal household study, which began in 2009 aiming to recruit over 100,000 individuals in 40,000 households. All persons in the household aged 10 years and older are eligible to be surveyed annually, with Adults (aged 16years+) given a combination of computer-assisted personal interview (CAPI) and self-completion questionnaire. Data collection for each wave of the study takes two years to complete. The survey includes questions relating to subjective wellbeing, employment status, health status and various economic and social topics, making it a viable dataset from which to examine social exclusion using the working framework described above. More detailed information on the sampling frame and data collection procedures are available (Buck & McFall 2012).

Measures

Having identified the Understanding Society dataset as a viable data source to examine social exclusion in later life, we constructed a measure of each domain identified in the working framework using the available data. When using secondary data, the operationalisation of social exclusion is inevitably constrained by the measures that are available. Understanding Society encompasses a very broad range of indicators suitable for its measurement; however these do not always appear in the same survey wave. To

overcome this problem, our definition of social exclusion spans two waves of data collection, waves 2 and 3.

Each domain of service provision and access, civic participation, and social relations and resources comprises 4 or 5 characteristics of a person's life selected to capture a relevant aspect of that domain. The guiding principle for deriving these individual items was to identify respondents located within the most excluded quartile of each indicator of social exclusion. Where this approach was not feasible the closest cut-off appropriate to the measure was used.

Service provision and access (SPA)

The domain of service provision and access encompasses access to basic services, the quality of local services and access to sports or leisure facilities. Respondents were asked whether they were able to access all services such as healthcare, food shops or learning facilities when they needed to. Those who reported they were not scored 1. They were also asked to rate a selection of local facilities as 'excellent', 'very good', 'fair', or 'poor'. A rating of 'fair' or 'poor' in relation to medical, or shopping facilities each scored 1, and a rating of 'poor' in relation to leisure facilities scored 1. Respondents also scored 1 if they reported finding it 'difficult' or 'very difficult' to get to a sports or leisure facility including leisure centre, recreation ground, or park, if they wanted to participate in sports and leisure activities. Scores were summed to give an overall scale from 0-5 with high scores indicating poorer service provision and access.

Civic participation (CP)

The domain of civic participation encompasses engagement in the activities of an organisation, participation in cultural, sport or leisure activities, and volunteering. Respondents were asked whether they regularly joined in the activities of a listed organisation (Political party, Trade union, Environmental group, Parents/School association, Tenants/Residents group, Religious/Church organisation, Voluntary services group, Pensioners group/organisation, Scouts/Guides organisation, Professional organisation, Other community group, Social/Working men club, Sports club, Women's Institute/Towns women's guild, Women's group/Feminist organisation, Other group or organisation)

regardless of whether they were a member or not. Those who reported that they did not scored 1.

Participation in cultural, sport or leisure facilities measures both breadth and frequency of participation. Respondents were presented with separate lists and asked which if any activities they had partaken in during the last 12 months. These lists included i) Art activities (Dance (including ballet); Sang to an audience or rehearsed for a performance (not karaoke); Played a musical instrument; Written music; Rehearsed or performed in a play/drama, opera/operetta or musical theatre; Taken part in a carnival or street arts event (as musician, dancer or costume maker); Learned or practised circus skills; Painting, drawing, printmaking or sculpture; Photography, film, or video making as an artistic activity (not family or holidays); Used a computer to create original artworks or animation; Textile crafts, wood crafts or any other crafts such as embroidery or knitting, wood turning, furniture making, pottery or jewellery; Read for pleasure (not newspapers, magazines or comics); Written any stories, plays or poetry; Been a member of a book club where people meet up to discuss and share books); ii) Art events (Film at a cinema or other venue; Exhibition or collection of art, photography or sculpture or a craft exhibition (not crafts market); Event which included video or electronic art; Event connected with books or writing; Street art or public installation (art in everyday surroundings, or an art work such as sculpture that is outdoors or in a public place); Carnival or culturally specific festival (for example, Mela, Baisakhi, Navrati, Feis); Play/drama, pantomime or a musical; Opera/operetta; Classical music performance; Rock, pop or jazz performance; Ballet; Contemporary dance; African people's dance or South Asian and Chinese dance), iii) Visits to historic sites (City or town with historic character; Historic building open to the public (non-religious); Historic park or garden open to the public; Place connected with industrial history (e.g. an old factory, dockyard or mine) or historic transport system (e.g. and old ship or railway); Historic place of worship attended as a visitor (not to worship); Monument such as a castle, fort or ruin; Site of archaeological interest (e.g. Roman villa, ancient burial site); Site connected with sports heritage (e.g. Wimbledon) (not visited for the purposes of watching sport); iv) Participation in mild intensity sports or leisure (Snooker, pool or billiards; Darts; Ten-pin bowling; Rambling, walking for pleasure or recreation; Shooting); v) Participation in moderate intensity sports or leisure (Health, fitness, gym or conditioning activities (including

aerobics, keep-fit classes, weight-training or weight-lifting); Gymnastics; Swimming or diving; Cycling, BMX or mountain biking (for sport or recreation); Football (including 5 or 6-a-side); Rugby (Union or League) or American Football; Track and field athletics; Jogging, cross-country, road-running; Hill trekking, backpacking, climbing or mountaineering; Golf (including pitch and putt); Boxing; Martial arts (including tai chi, taekwondo, karate and judo); Water sports, including yachting, dinghy sailing, canoeing, rowing, windsurfing, water-skiing etc.; Horse riding; Basketball; Netball; Volleyball; Cricket; Hockey (excludes ice, roller or street hockey which are included in 'other'); Baseball, softball or rounders; Racquet sports such as table tennis, tennis, badminton or squash; Ice-skating; Skiing (on snow, or an artificial surface: on slopes or grass); Motor sports; Angling or Fishing; Archery; Yoga or Pilates; Bowls (indoors or outdoors); Croquet; Other Sporting Activity such as triathlon, fencing, lacrosse, orienteering, curling, Gaelic sports, skateboarding, parachuting or scuba diving, or anything else); and vi) Visits a public library, an archive centre or records office, or an art gallery or museum. Respondents within the bottom quartile of a count of the total number of activities engaged in during the last 12 months scored 1.

Respondents were also asked the frequency with which they had participated. Six separate frequencies were recorded representing 'art activities', 'art events', 'visits to historic sites', 'visits to public libraries', 'visits to archive centres or record offices', and visits 'to art galleries or museums' ranging from 'once in the last 12 months' to 'at least once of week'. Responses were converted to approximate the number of days this represented in the last 12 months: 'not at all' (0), once in the last 12 months (1), twice in the last 12 months (2), less often than once a month but at least 3 or 4 times a year (4), less often than once a week but at least once a month (26), and at least once a week (52). Slightly different approximations were derived for sport or leisure activities because of minor differences in the response categories: not at all (0), once in the last 12 months (1), twice in the last 12 months (2), less often than once a month but at least 3 or 4 times a year (4), at least once a month (12), at least once a week but less than three times (104), and three or more times a week (156). The eight frequencies were then summed into one overall frequency of participation in cultural, sport or leisure activities. Respondents within the bottom quartile scored 1. Respondents also scored 1 if they had not volunteered in the last 12 months.

Scores were then summed and recalibrated to give an overall scale from 0-5 with higher scores indicating poorer civic participation.

Social relations and resources (SRR)

The domain of social relations and resources encompasses living alone, contact with children, marriage or partnership closeness, friendships, and going out socially or visiting friends.

Closeness of a partnership was measured according to the participant's responses to the statements: *"How much do they really understand the way you feel about things?; How much can you rely on them if you have a serious problem?; How much can you open up to them if you need to talk about your worries?; How much do they criticise you?; How much do they let you down when you are counting on them?; and How much do they get on your nerves?"*. Responses to the first three questions were coded 0 (not at all), 1 (a little), 2 (somewhat), and 3 (a lot), and in reverse for the latter three, and then summed to construct a scale. Respondents within the bottom quartile scored 1.

Unlike other items constructed to measure exclusion, respondents who lived alone scored 2. This compensates for the fact that closeness of partnerships is only relevant to married or cohabiting respondents. As a consequence, a respondent scored 2 if they lived alone and 1 if they were living with a spouse or partner but the relationship was not very close.

Respondents who reported having a child aged 16 or more living outside of the home were asked how often they saw them (if they had more than one child this was the child they saw most often). Responses were converted to approximate the number of days this represented in the last 12 months: Never or no child living outside of the home (0), less often than several times a year (2), several times a year (8), at least once a month (12), at least once a week (52), and daily (365). Respondents were also asked how often they had contact by telephone, email or letter, which was coded using the same approach above and then divided by two, lending greater weight to face-to-face contact. The two frequencies were summed and respondents within the bottom quartile scored 1.

Respondents were asked the number of close friendships they had, and those within the bottom quartile of the total scored 1. Respondents also scored 1 if they reported not going

out socially or visiting friends when they felt like it. Scores were then summed to give an overall scale from 0-5 with higher scores indicating poor social relations and resources.

Overall social exclusion

An overall social exclusion score was constructed by simply summing the three subdomains of service provision and access, civic participation, and social relations and resources. This is measured on a scale of 0-15 with higher scores indicating greater social exclusion.

Sample

Our social exclusion framework and measures could be applied to any population, however, they were specifically designed with those in later life in mind. We are particularly interested in social exclusion in older adults and will therefore only use data from participants aged 65 years and over. Our selected sample includes all respondents who were aged 65 years and over in Wave 3 of Understanding Society who were not missing on more than one item in any one subscale: service provision and access, civic participation, social relations and resources (n = 8578). As social exclusion was measured over two Waves of Understanding Society (2 and 3) respondents were present in both.

Imputation for item missingness

Prior to the construction of the overall social exclusion scale and three separate subscales, imputation using chained equations (ICE) was employed in STATA 14.0 (Royston, 2004, 2005) to impute missing values for respondents who were missing a single item within a subscale. Table 2 presents the relevant prevalence for the items pre- and post-imputation.

Summary

This paper has outlined the derivation of a social exclusion framework and scale for studies of social exclusion in later life using data from Understanding Society. This is the first step towards a full test of the model of the determinants and outcomes of social exclusion in older age outlined in figure 1. A full discussion around the construction of the working social exclusion framework, and a descriptive analysis of those excluded in later life in the understanding society dataset will be published separately. The relationship between social exclusion and the domains of health and wellbeing, and environment and neighbourhood will also be examined in more depth in companion articles.

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Table 1: Definitions of social exclusion domains.

Domain	Definition
Service provision and access	Reflects access to everyday public and private services, both within and beyond the home, and transport.
Civic Participation	Encompasses cultural, educational and political engagement. Factors that enable a person to connect with and contribute to their society, and be involved in its decision-making.
Social relations and resources	Reflects the importance of meaningful relationships with others, recognising family and friends as possible sources of support and engagement.
Economic, financial and material resources	Includes subjective and objective financial circumstances, income, housing, and assets in the form of material possessions.
Environment and neighbourhood	Represents residential environments including geographic properties, neighbourhood conditions and facilities, sense of community, crime and perceived safety, and place identity.
Health and wellbeing	Reflects subjective and objective physical and mental health, health behaviours, and mortality.
Discrimination	Includes symbolic exclusion: negative representation or prejudicial treatment for a particular characteristic or group membership, and identity exclusion: disregard of one's whole identity by only recognising a single characteristic/identity.

Table 2: Pre and post imputation prevalence for each exclusion item.

	Pre-imputation			Imputed results		
	Cross-sectional weight in Wave 3; age 65+ in Wave 3			Cross-sectional weight in Wave 3; age 65+ in Wave 3; single item missing allowable within each domain		
	%	Missing	n	%	Missing	Final n
Service access and provision						
Does not have access to basic services	5.4%	9		5.0%	0	
Medical facilities fair or poor	18.0%	113		17.9%	0	
Shopping facilities fair or poor	36.2%	47		36.5%	0	
Leisure facilities poor	17.9%	992		17.8%	0	
Access to sport or leisure facilities difficult or very difficult	15.9%	745	9118	16.0%	0	8578
Civic participation						
Does not in join in the activities of 16 organisations on a regular basis	52.6%	92		51.5%	0	
Participates in few types of sports, leisure, cultural activities (bottom 25%) = 0-1 activities	17.6%	395		29.4% ¹	0	
Participates less frequently in sports, leisure, cultural activities (bottom 25%) = 50 times or less	24.7%	399		24.0%	0	
Does not volunteer	78.9%	162	9118	78.2%	0	8578
Social relations and resources						
Lives alone	33.0%	0		32.6%	0	
Low frequency of contact with child living outside home (bottom 25%) = no child, no contact or score <29	24.3%	27		23.8%	0	
Partnership not very close (definition excludes those without a partner) = score < 29	26.8%	1253		23.3% ¹	0	5256
One or no close friends	17.6%	77		17.1%	0	
Does not go out socially or visit friends when feels like it	20.0%	4	9118	19.0%	0	8578

Notes: ¹ new cut-point for bottom 25% implemented after imputation (final cut-points stated in the first column).