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Exploring the Value of Understanding Society for Neighbourhood Effects Analyses

Social and Economic History

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Abstract

Understanding Society is a large representative household panel study for the UK. The study follows the same 40,000 households over time, beginning in 2009 and providing a detailed picture of how people's lives are changing. One of the many innovative features of Understanding Society is that a great deal of information about neighbourhoods can be used alongside the individual and household-level information collected in the study, making it a useful study for neighbourhood effects analyses. In this paper the author explores four Understanding Society data products, based on four different types of rural-urban neighbourhood classifications, to throw light on how much heterogeneity in neighbourhood contexts is captured in the first waves of Understanding Society, including change in neighbourhood contexts.

Keywords

neighbourhoods – quantitative analysis – household panel study – record linkage – panel data analysis – geo-marketing

- Related data set "Understanding Society: Waves 1–6, 2009–2015" with DOI http://dx.doi.org/10.5255/UKDA-SN-6614-7 in repository "UK Data Service".
- See the showcase of the data in the Exhibit of Datasets: http://dansdata-journal.nl/rdp/dsdoc.html?id=knies2017

1. Introduction

The idea that where people live can have an effect on their life chances over and above the effect of their individual characteristics has been the focus of much scientific inquiry across disciplines since the 1990s (Dietz, 2002; Friedrichs, Galster, & Musterd, 2003; Galster, 2008). Neighbourhoods are places where people interact with one another, offering opportunities for learning from peers and role models but also placing limits on behaviours and aspirations; they provide access to services such as schools, shops and workplaces. Various socio-economic outcomes have been suggested to be influenced by where people live: employment, poverty and receipt of income support (Culliney, 2016; Musterd & Andersson, 2006; Plum & Knies, 2015), health (Propper et al., 2005), schooling (Burgess, Gardiner, & Propper, 2006; Overman, 2002) and life satisfaction as a catch-all measure of well-being (Knies, Burgess, & Propper, 2008; Knies, Nandi, & Platt, 2016; Shields, Price, & Wooden, 2009).

Longitudinal studies that follow individuals and track stability and change in different types of neighbourhoods are important vehicles in providing evidence of neighbourhood effects. *Understanding Society*, the UK Household Longitudinal Study (UKHLS) is the largest household panel study in the world, following the same approximately 100,000 individuals (at the first round of annual interviews) over time. It is a multi-topic, multipurpose study that not only provides large numbers of cases with particular characteristics salient to researchers interested in neighbourhood effects (such as unemployed people, teenagers or ethnic minorities) but also asks participants about many aspects of life that have been linked to neighbourhood effects. A lesser-known feature of the data is that it is possible to obtain access to objective qualitative information about the Study members' neighbourhoods, and to official geographical identifiers that allow record linkage with official social indicators about the neighbourhoods thereby opening up numerous avenues for new neighbourhood effects research.

2. Context

Understanding Society is the latest addition to the UK's collection of large-scale longitudinal studies. The household panel study is representative (subject to weighting) for each country and region of the UK, and for areas of different population density within them. It started in 2009 with around 26,000 private households; in 2010 around 8,000 households who were previously interviewed as part of the *British Household Panel Survey* (BHPS) were added (University

of Essex, 2010). The Study includes a boost sample of minority ethnic groups making it a unique resource for tracking change in the circumstances of minorities whose socio-economic disadvantage and residential segregation have been the focus of much neighbourhood research.

Interviews take place with all individuals aged 10 or older in responding households. The Study collects a wealth of information relating to the respondents' economic and social circumstances, their values and attitudes, and provides a detailed picture about how people's life circumstances change year on year. For example, Lynn and Knies (2015, p. 131) reported that from one wave to the next and over each of the first five waves, the Study has captured more than 1,800 transitions into employment, more than 600 transitions into self-employment, and more than 1,600 transitions into unemployment.

The Study members' neighbourhood contexts and changes therein have not been reported. This would be an important first step in establishing the Study's research potential for neighbourhood effects research.

3. Aims

The standard end-user licence (public use) version of *Understanding Society* data, accessed via the UK Data Service, includes some higher-level geographical information (i.e., country, region, a coarse indicator of urbanity, respondent's neighbourhood perceptions). Analysts can explore raw frequencies in the online dataset documentation. By contrast, access to mid- or low-level geographical information is granted only to approved researchers and projects via a Special License (SL). Overall, the data series includes seven SL products that provide valuable qualitative information about the Study members' areas, and a further 11 products that allow linkage of geographically coded information. Applying for SL access presents a (low) hurdle to access, and linking data requires some specialist skills. The aim of this data paper is to compare and promote the neighbourhood information-enriched datasets and to provide key statistics about four resources available through SL to help potential analysts make a better-informed decision about applying for access.

4. Methods

We used data from the first five waves of *Understanding Society* (University of Essex. Institute for Social and Economic Research, 2015a), and linked it with information from four related data products that provide qualitative

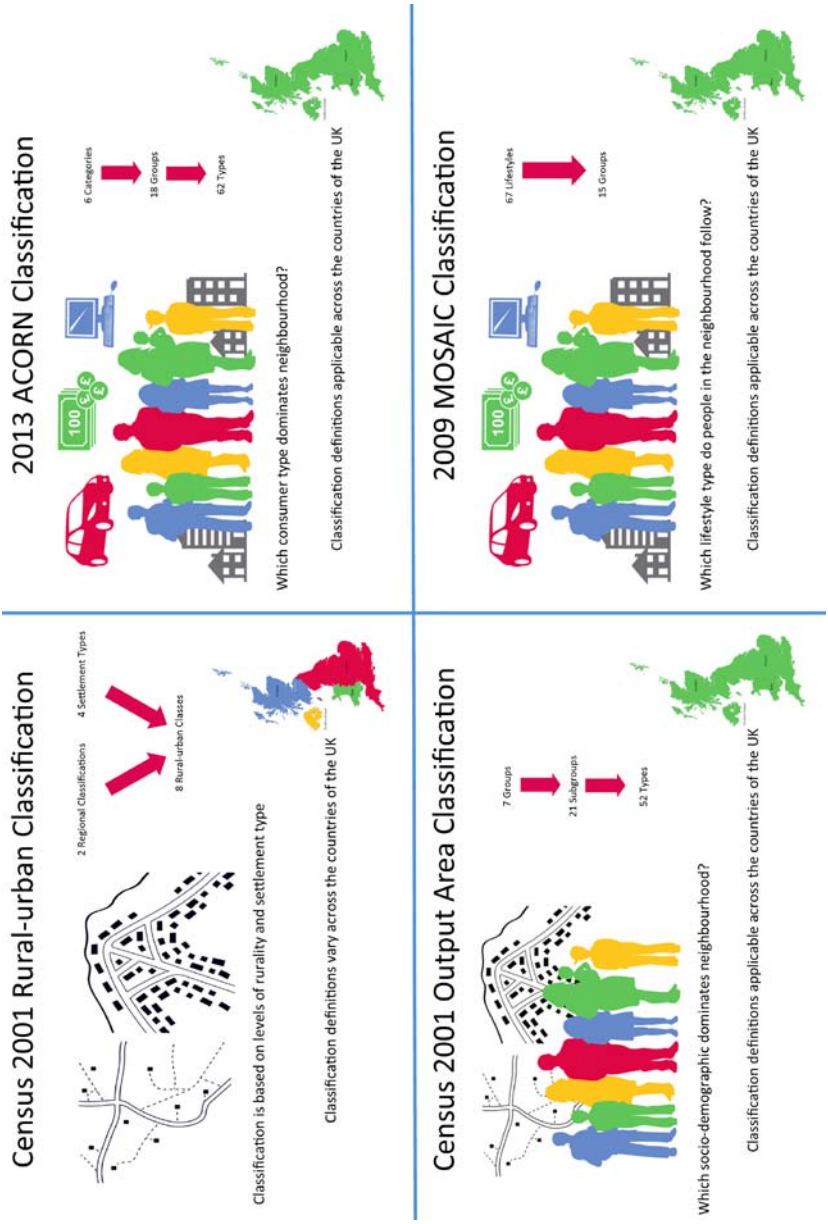

FIGURE 1 *Features of each neighbourhood classification used.*

information about the types of neighbourhood people live in. The four neighbourhood classifications used are:

– 2001 Census Rural-urban classification
– 2001 Census Output Area Classification (OAC)
– ACORN 2013 classification
– MOSAIC UK 2009 classification

4.1. *The Neighbourhood Classifications*

Figure 1 sets out the distinctive features of each neighbourhood classification used in this paper.

The 2001 Census 'Rural-urban classification' is produced by the Office for National Statistics (ONS) on the basis of the 2001 Census and provides information about the rurality of very small Census areas (Office for National Statistics, 2016b). The definition adopts a settlement-based approach, comprising 4 settlement types, assigned to either a 'sparse' or 'less sparse' regional setting to give 8 classes of output areas.

The 2001 Census Output Area Classification (OAC) is another classification produced by the ONS that draws on socio-economic and consumption information collected in the Census and allows for greater granularity in urban settings. It provides 52 types overall which can be aggregated to 7 or 21 groups (Office for National Statistics, 2016a). An additional advantage of the classification is that it is comparable across the countries of the UK.

An alternative segmentation classification, developed primarily for analysing consumer behaviour is the *ACORN* classification, produced by a geomarketing firm on the basis of commercial data, and updated annually (CACI Limited, 2014). The classification has 62 neighbourhood types which can be aggregated to 18 groups and six descriptive categories.

Finally, MOSAIC UK 2009 is a typology of consumers, produced on an annual basis using Census and other publically funded data as well as commercial data. The typology reports how many people in the areas are members of 67 resident lifestyle types overall (Experian Limited, 2009). As such, it is well placed to capture even the smallest changes in the neighbourhood composition over time. The lifestyle types can be aggregated to 15 groups.

These first three classifications have in common that they are already linked to *Understanding Society* and provide a static top-level description of the neighbourhood at a particular point in time. In combination with *Understanding Society*, they allow us to investigate the role of neighbourhood change for movers only. The fourth classification provides very detailed information for each neighbourhood and needs to be linked by analysts themselves using

look-up codes available as part of Understanding Society. In combination with *Understanding Society*, the classification allows us to look at neighbourhood change for movers and non-movers alike.

Here we describe and compare response profiles across these neighbourhood classifications. We first describe neighbourhood contexts in the cross-section for Wave 1. This is followed by an exploration of the longitudinal patterns in the data. All figures are based on unweighted data for responding adults (i.e., individuals aged 16 or above), which means the results are not representative for the population living in the UK. For a detailed description of the sample design, see Knies (2015).

5. Classification Comparisons

5.1. *2001 Census Rural-Urban Classification*

Figure 2 and Table 1 report the number of adult respondents in Wave 1.[1] The classification varies across the countries of the UK, hence we report profiles by country.

It can be seen that around two-thirds of respondents in England and half of those in Wales and Scotland live in densely populated urban areas. The Study also includes more than more than 100 respondents in all but the "Hamlet and Isolated Dwelling less sparse" category in England.

However, with the bulk of the sample respondents living in (dense) urban areas, the Rural-urban classification does not pick up neighbourhood heterogeneity for most respondents. The OAC, ACORN and MOSAIC classifications provide more differentiated descriptions of neighbourhoods. Figure 2 shows for respondents who live in Rural-urban type 'Urban area-less sparse' (England and Wales only) that all categories of the respective other classifications are represented in the *Understanding Society* sample.

5.2. *2001 Census Output Area Classification (OAC)*

Table 2 shows that the 7-category OAC splits respondents into three to four large and three to four smaller sections of similar size, but with variation across countries. For example, the multicultural community type has 8,902

1 Additional results for Waves 1-5 are available, DOI:10.5255/UKDA-SN-852682. Sample sizes in Scotland, Northern Ireland and Wales increased significantly in Wave 2 when the BHPS incorporated its boost samples for these countries. In the later waves, all area types have more than 100 respondents. The only exceptions are sparse urban areas in Wales, remote and very remote small towns in Scotland, and, in Wave 5 only, the Derry urban area in Northern Ireland.

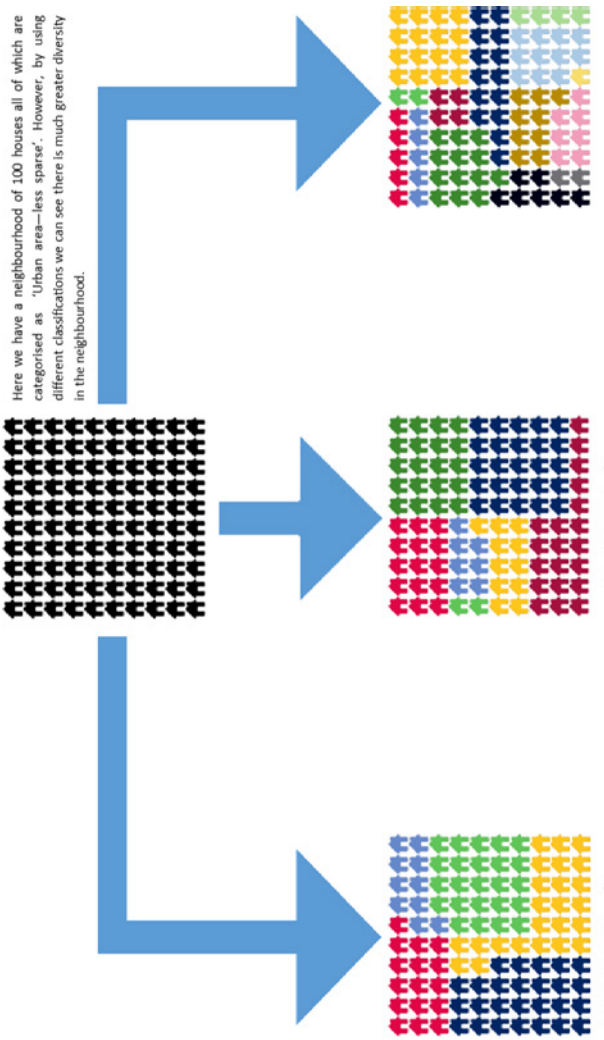

FIGURE 2 *Neighbourhood heterogeneity within Census 2001 Rural-urban type: 'Urban area – less sparse'. Treemaps of 2001 Census 2001 OAC, ACORN 2013 and MOSAIC 2009 in Understanding Society Wave 1. England and Wales only.*
SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2001 CENSUS RURAL-URBAN CLASSIFICATION AND 2001 CENSUS OUTPUT AREA CLASSIFICATION, ACORN 2013 AND MOSAIC 2009. SAMPLE RESTRICTED TO ONE OBSERVATION PER ENUMERATED HOUSEHOLD.

TABLE 1 *Area profiles of respondents living in Rural-urban area type 'Urban area – less sparse', England and Wales only*

Data set	Number of observations	%
Census 2001 OAC		
1 Blue collar communities	3,259	15
2 City living	1,509	7
3 Countryside	479	2
4 Prospering suburbs	4,132	19
5 Constrained by circumstances	2,379	11
6 Typical traits	4,449	20
7 Multicultural	5,520	25
Total	21,727	100
2013 ACORN		
1 Affluent Achievers	3,413	16
2 Rising Prosperity	2,097	10
3 Comfortable Communities	5,239	24
4 Financially Stretched	5,201	24
5 Urban Adversity	5,685	26
6 Not Private Households	70	0
Total	21,705	100
MOSAIC 2009 (*dominant group*)		
A: Residents of isolated rural communities	9	0.1
B: Residents of small and mid-sized towns with strong local roots	508	5
C: Wealthy people living in the most sought-after neighbourhoods	244	2
D: Successful professionals living in suburban or semi-rural homes	550	5
E: Middle income families living in moderate suburban semis	1,753	16
F: Couples with young children in comfortable modern housing	419	4
G: Young, well-educated city dwellers	1,420	13
H: Couples and singles in small modern starter homes	393	4
I: Lower income workers in urban terraces in often diverse areas	1,513	14

Data set		Number of observations	%
J:	Owner occupiers in older-style housing, typically in ex-industrial areas	759	7
K:	Residents with sufficient incomes in right-to buy social housing	1,163	11
L:	Active elderly people living in pleasant retirement locations	134	1
M:	Elderly reliant on state support	167	2
N:	Young people renting flats in high density social housing	962	9
O:	Families in low-rise social housing with high levels of benefit need	787	7
Total		10,781	100

SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2001 CENSUS RURAL-URBAN CLASSIFICATION AND 2001 CENSUS OUTPUT AREA CLASSIFICATION, ACORN 2013 AND MOSAIC 2009. SAMPLE RESTRICTED TO ONE OBSERVATION PER ENUMERATED HOUSEHOLD.

respondents in England (E), owing to the ethnic minority boost sample, but less than 100 in Wales (W) and Scotland (S), and none in Northern Ireland (NI). The "City living" category is the smallest category in all countries. In empirical analyses, well-represented types may be broken up into its constituent groups and types with low frequencies may need to be treated as outliers. Figure 3 and Table 2 show the profile for Wave 1 responding adults by country.

However, the downside of both the Rural-urban classification and the OAC is that there has been considerable population growth in the UK since the 2001 Census, which means the classifications may not describe very well the neighbourhoods *Understanding Society* respondents lived in during 2009 to 2014 (Office for National Statistics, 2015).

5.3. *2013 ACORN Classification*

Understanding Society provides the 2013 version of ACORN which was made available for academic research free of charge. Table 3 reports sample sizes using the 6-category version of the typology. Figure 4 and Table 3 show the profile for Wave 1 for responding adults by country.

Whilst providing similar cell sizes to OAC and qualitative information about the neighbourhoods, ACORN's principal advantage is that the neighbourhood

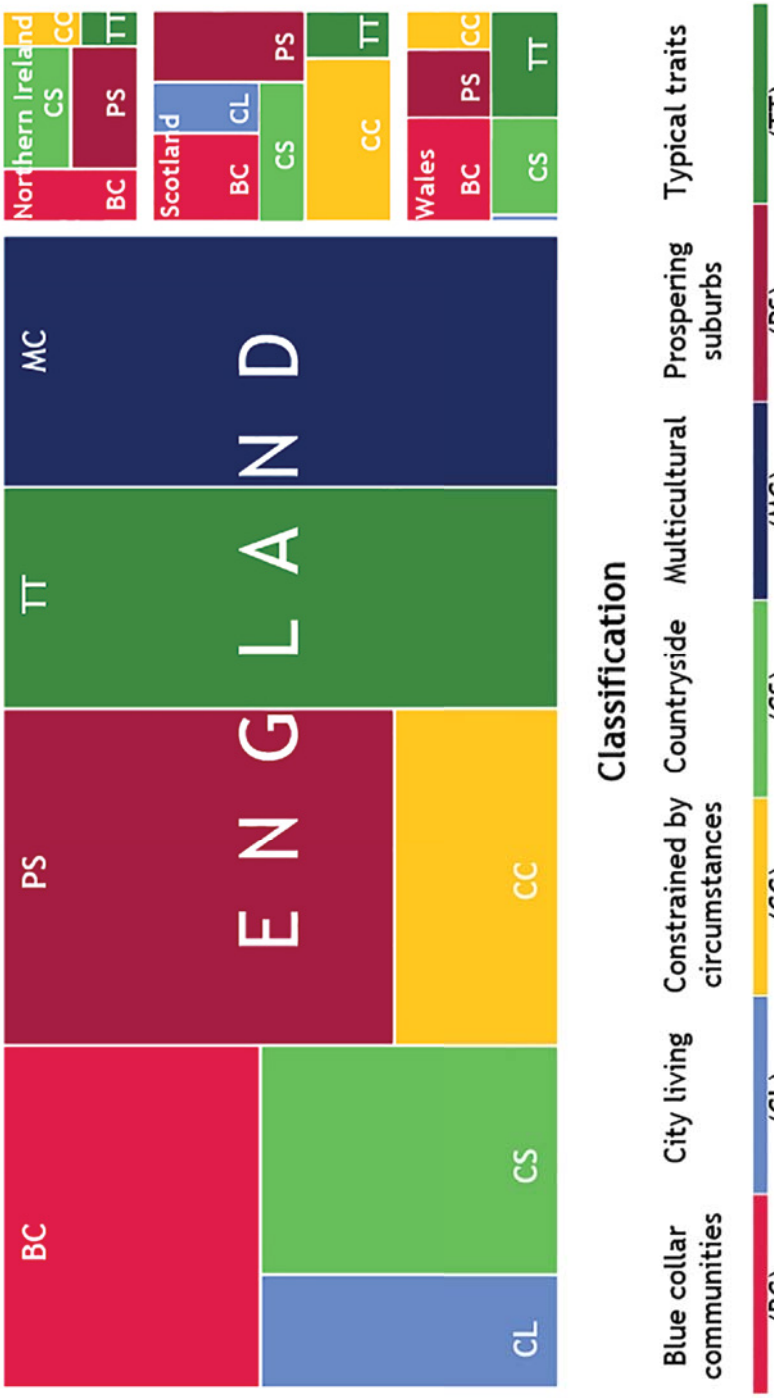

FIGURE 3 *2001 Census Output Area Classification treemap profile of the Understanding Society sample in Wave 1. Responding adults by country.*
SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2001 CENSUS OUTPUT AREA CLASSIFICATION.

TABLE 2 *2001 Census Output Area Classification profile of the Understanding Society sample in Wave 1, responding adults by country*

Census Output Area Classification	England (E)	Wales (W)	Scotland (S)	Northern Ireland (NI)	UK
Blue collar communities	5,530	621	666	502	7,319
City living	2,211	61	353	23	2,648
Countryside	4,253	440	388	560	5,641
Prospering suburbs	8,039	372	734	543	9,688
Constrained by circumstances	3,499	251	961	212	4,923
Typical traits	7,636	472	276	157	8,541
Multicultural	8,902	45	25	n.d.	8,972

Note: Sample size calculation based on number of enumerated individuals that have a final interview outcome code of 1 "full interview".

SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2001 CENSUS OUTPUT AREA CLASSIFICATION.

TABLE 3 *2013 ACORN profile of the Understanding Society sample in Wave 1, number of responding adults by country*

ACORN 6 category group	England	Wales	Scotland	Northern Ireland	UK
Affluent Achievers	8,315	326	679	334	9,654
Rising Prosperity	3,369	62	224	48	3,703
Comfortable Communities	10,736	784	716	887	13,123
Financially Stretched	8,896	807	1,037	485	11,225
Urban Adversity	8,596	279	724	234	9,833

Note: The "Not in private households" category has been suppressed. Sample size calculation based on number of enumerated individuals that have a final interview outcome code of 1 "full interview".

SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2013 ACORN CLASSIFICATION.

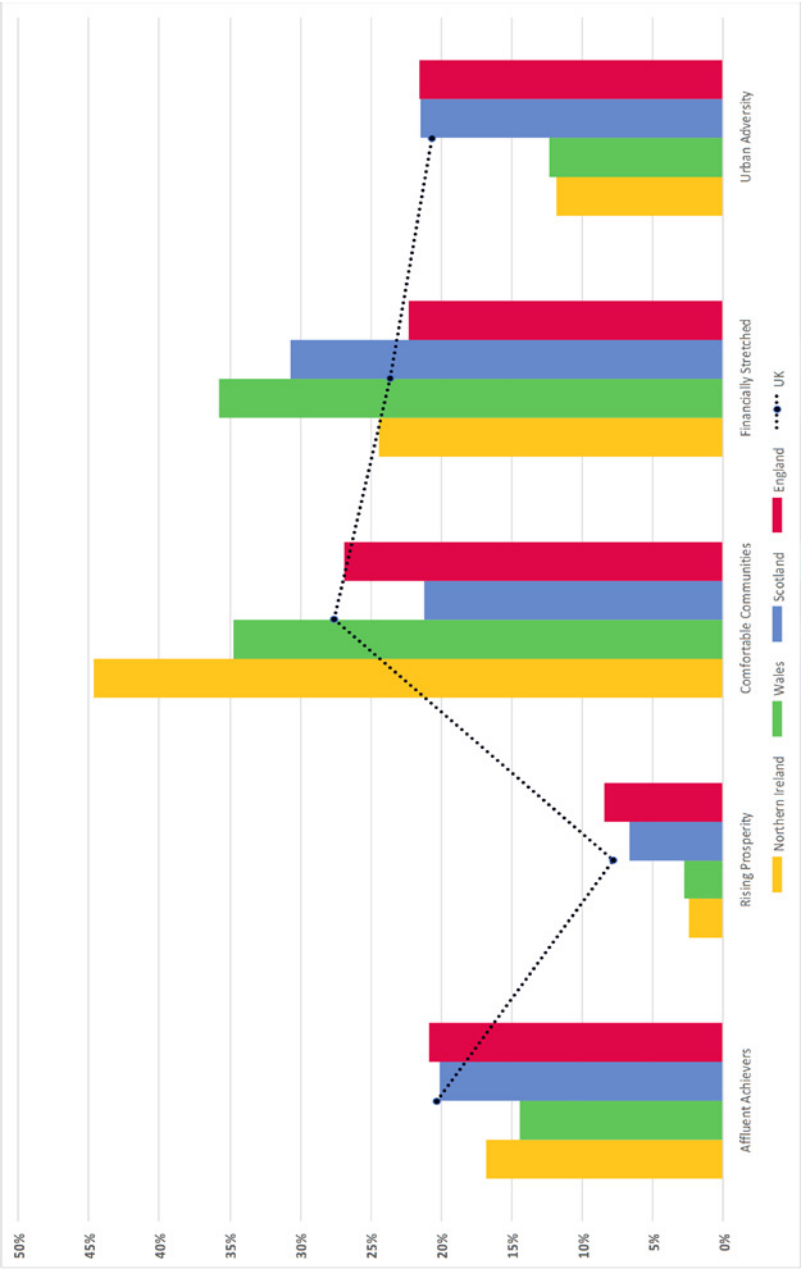

FIGURE 4 *2013 ACORN profile of the Understanding Society sample in Wave 1. Percentage of responding adults by country.*
SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2013 ACORN CLASSIFICATION.

context can be measured annually. Thus, analysts do not have to assume that the neighbourhood context is fixed for the ten-year period between censuses. To exploit this feature, users would have to acquire the annual neighbourhood data and link it with *Understanding Society* using geographical identifiers such as the Census Lower Super Output Area (LSOA) code.

5.4. *2009 MOSAIC Classification*

We have followed this LSOA linking approach using the MOSAIC UK 2009 typology of consumers. Area descriptions for 2004–2008 and 2010–2011 have been made available for research purposes free of charge.

To make the MOSAIC classification more comparable with OAC and ACORN, we aggregated the 67 types to 15 groups and calculated the dominant group in the neighbourhood. Figure 5 and Table 4 report sample sizes for responding adults by country and dominant group. Sample sizes for this analysis are much lower because we only had access to MOSAIC data for 2010 and 2011 and added the information to those respondents who were interviewed in the respective years. Effectively, this means we lose half of the Wave 1 and Wave 3 samples (i.e., those interviewed in 2009 and 2012) and we have no observations in Waves 4 and 5. It can be seen that the number of observations in some types is well below 100 but would like to highlight that the classification does not require the data to be categorised in this way: the classification provides headcounts for all groups in the neighbourhood and can be used as continuous measures.

5.5. *Changes in Neighbourhood Context Across Time*

Finally, we looked at information over time. Figure 6 and Table 5 report the number of adults who provided interviews in waves 1 and 2, stratified by the characteristics of their neighbourhood in the first wave. The table reports the number of respondents whose neighbourhood contexts remained the same and the number and proportion for whom the neighbourhood context changed. For the rural-urban classification, OAC and ACORN change stems only from relocations; change in MOSAIC contexts stems from both relocations and changes in neighbourhood contexts. Results are reported for respondents who live in England in both waves. Sample sizes for the other UK countries will be significantly lower.

Overall, with respect to stability in neighbourhood contexts, cell sizes for all rural-urban areas in England remain above the 100 observations threshold with Hamlets and sparse urban areas dropping just below that threshold in some waves. Cell sizes for all OAC and ACORN groups are in the thousands, with the general patterns observed in the cross-sectional data replicated in the longitudinal sample.

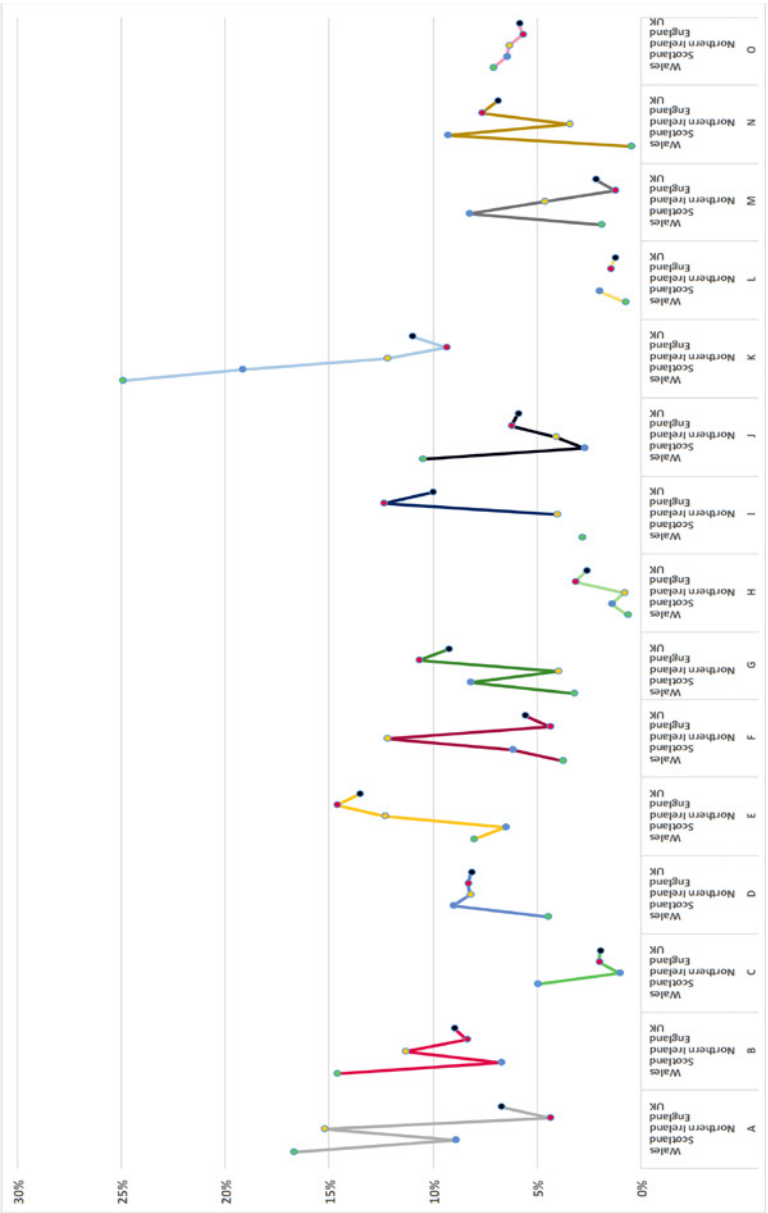

FIGURE 5 *2009 MOSAIC profile of the Understanding Society sample in Wave 1. Percentage of responding adults by country.*
SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2001 CENSUS LOWER SUPER OUTPUT AREAS, LINKED WITH EXPERIAN MOSAIC UK 2009.

TABLE 4 *2009 MOSAIC profile of the Understanding Society sample in Wave 1, number of responding adults by country*

MOSAIC group		England	Wales	Scotland	Northern Ireland	UK
A:	Residents of isolated rural communities	870	183	140	569	1,762
B:	residents of small and mid-sized towns with strong local roots	1,664	160	106	423	2,353
C:	Wealthy people living in the most sought-after neighbourhoods	396	<5	78	38	512
D:	Successful professionals living in suburban or semi-rural homes	1,649	49	142	306	2,146
E:	Middle income families living in moderate suburban semis	2,902	88	102	460	3,552
F:	Couples with young children in comfortable modern housing	865	41	97	455	1,458
G:	Young, well-educated city dwellers	2,122	35	129	148	2,434
H:	Couples and singles in small modern starter homes	631	7	22	30	690
I:	Lower income workers in urban terraces in often diverse areas	2,454	31	<5	151	2,636
J:	Owner occupiers in older-style housing, typically in ex-industrial areas	1,242	115	43	153	1,553
K:	Residents with sufficient incomes in right-to buy social housing	1,864	273	301	456	2,894
L:	Active elderly people living in pleasant retirement locations	286	8	32	<5	326
M:	Elderly reliant on state support	251	21	130	173	575

TABLE 4 *2009 MOSAIC profile of the Understanding Society sample in Wave 1, number of responding adults by country* (cont)

MOSAIC group		England	Wales	Scotland	Northern Ireland	UK
N:	Young people renting flats in high density social housing	1,525	5	146	128	1,804
O:	Families in low-rise social housing with high levels of benefit need	1,128	78	101	236	1,543

Note: Sample size calculation based on number of enumerated individuals that have a final interview outcome code of 1 "full interview".
SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1, LINKED WITH 2001 CENSUS LOWER SUPER OUTPUT AREAS, LINKED WITH EXPERIAN MOSAIC UK 2009.

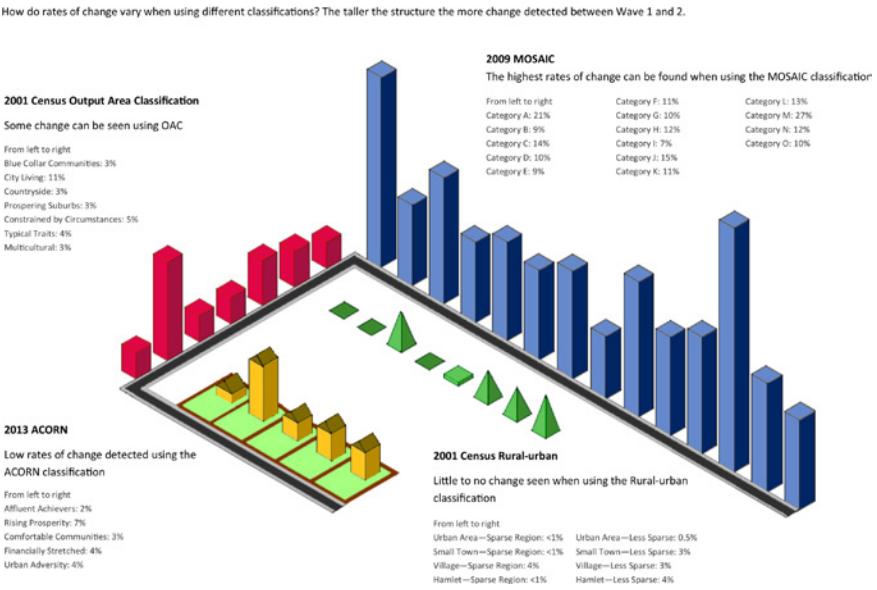

FIGURE 6 *Wave-on-wave stability and change in neighbourhood characteristics for responding adults in Wave 1 and Wave 2.*
SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1-5 LINKED WITH 2001 CENSUS RURAL-URBAN CLASSIFICATION, 2001 CENSUS OUTPUT AREA CLASSIFICATION, 2013 ACORN CLASSIFICATION AND 2009 MOSAIC UK.

TABLE 5 *Wave-on-wave stability and change in neighbourhood characteristics for responding adults in Wave 1 and Wave 2, number of observations*

Neighbourhood type (Wave 1)	**Change?**		
	No	**Yes**	**(%)**
2001 Census Urban-rural classification			
Urban area – sparse region	97	<5	(–)
Small town – sparse region	147	<5	(–)
Village – sparse region	129	6	(4)
Hamlet* – sparse region	74	<5	(–)
Urban area less sparse	23,899	112	(<1)
Small town less sparse	2,385	69	(3)
Village less sparse	1,888	67	(3)
Hamlet* – less sparse	697	26	(4)
2001 Census OAC			
Blue collar communities	4,110	146	(3)
City living	1,281	160	(11)
Countryside	3,264	104	(3)
Prospering suburbs	6,247	163	(3)
Constrained by circumstances	2,503	120	(5)
Typical traits	5,589	236	(4)
Multicultural	5,504	176	(3)
2013 ACORN			
Affluent Achievers	6,449	163	(2)
Rising Prosperity	2,090	157	(7)
Comfortable Communities	7,960	264	(3)
Financially Stretched	6,207	269	(4)
Urban Adversity	5,663	266	(4)
2009 MOSAIC **			
A: Residents of isolated rural communities	548	147	(21)
B: Residents of small and mid-sized towns with strong local roots	1,253	128	(9)
C: Wealthy people living in the most sought-after neighbourhoods	262	42	(14)

TABLE 5 *Wave-on-wave stability and change in neighbourhood characteristics for responding adults in Wave 1 and Wave 2, number of observations* (cont)

Neighbourhood type (Wave 1)		Change?		
		No	**Yes**	**(%)**
D:	Successful professionals living in suburban or semi-rural homes	1,222	129	(10)
E:	Middle income families living in moderate suburban semis	2,071	193	(9)
F:	Couples with young children in comfortable modern housing	629	75	(11)
G:	Young, well-educated city dwellers	1,249	142	(10)
H:	Couples and singles in small modern starter homes	437	57	(12)
I:	Lower income workers in urban terraces in often diverse areas	1,611	113	(7)
J:	Owner occupiers in older-style housing, typically in ex-industrial areas	871	148	(15)
K:	Residents with sufficient incomes in right-to-buy social housing	1,345	166	(11)
L:	Active elderly people living in pleasant retirement locations	196	28	(13)
M:	Elderly reliant on state support	147	54	(27)
N:	Young people renting flats in high density social housing	844	114	(12)
O:	Families in low-rise social housing with high levels of benefit need	806	88	(10)

Notes: Basis is adults living in England and responding to Wave 1 and Wave 2. * Full label is Hamlet and Isolated Dwelling. ** The 2009 MOSAIC classification was only available for 2010 to 2011. Wave 1 to Wave 2 transitions therefore do not include respondents interviewed in 2009 (Wave 1 year 1).

SOURCE: UNDERSTANDING SOCIETY, 2015, WAVE 1–5 LINKED WITH 2001 CENSUS RURAL-URBAN CLASSIFICATION, 2001 CENSUS OUTPUT AREA CLASSIFICATION, 2013 ACORN CLASSIFICATION AND 2009 MOSAIC UK.

With respect to change, it can be seen that there is not very much change in neighbourhood characteristics from year to year. Although around 10% of the population move in any year, the neighbourhood contexts change for 0–5% of the sample when we consider the Rural-urban classification, with rates

particularly low in the largest category. Seeing as many moves happen within the same Rural-urban type, the classification is not very good at picking up change. Rates are slightly higher for OAC (3–11%) and ACORN (2–7%). By contrast, levels of change in the MOSAIC dominant groups amount to 7–27%. Note that the classification can also be used a lot more flexibly than presented here: analysts could, for example, look at change over time in the number of people of each of the 67 types and include this as continuous control variables in their neighbourhood effects models and changes can be separated into those stemming from moves versus those stemming from neighbourhood compositional changes.

6. Conclusion

Understanding Society provides a great many outcome and context variables for analyses of neighbourhood effects. The Study also provides access to a range of information about the neighbourhoods in which its members live, covering qualitative information that has already been linked and geographical identifiers that allow analysts to link their own neighbourhood data.

The analysis presented here describes respondents to the first five waves of Understanding Society in terms of the characteristics of their neighbourhoods. Four different neighbourhood classifications and their relative advantages have been described, and their strengths and weaknesses discussed. Our findings show that *Understanding Society* includes large numbers of observations in all types of neighbourhoods across all countries of the UK, and further captures people who move across different types of neighbourhoods. Linkage of longitudinal information about neighbourhoods allows analysts to disentangle the effects of relocations and neighbourhood change, making *Understanding Society* a powerful resource for neighbourhood effects research.

Finally, this paper can help users, and potential users, of *Understanding Society* make better informed choices about which classification to use to meet their own specific research question.

7. Data

- **The *Understanding Society* data series is deposited at the UK Data Service – DOI:**10.5255/UKDA-SN-6614-7
- Understanding Society: Waves 1–5, 2009–2014: Special Licence Access, Census 2001

  - **Rural-Urban Indicators** – **DOI:**10.5255/UKDA-SN-7454-3
  - **Output Area Classification** – **DOI:**10.5255/UKDA-SN-6674-6
  - **Acorn Type 2013** – **DOI:**10.5255/UKDA-SN-7453-3
- **Experian Demographic Data, 2004–2005 and 2008-2011** – **DOI:**10.5255/UKDA-SN-5738-1
- **Lower Layer Super Output Areas** – **DOI:**10.5255/UKDA-SN-6670-6
- **Temporal coverage:** 2009–2015

Note that as this is prospective longitudinal study, data are updated annually. The hyphenated number at the end of the DOI denotes a specific version of data released. All changes to data made are documented in the DOI change log, but older versions are not made routinely available.

The process for applying to access SL data products is described in the Understanding Society data access strategy and applicants are guided through the process when they download the data from the UK Data Service website.

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References

Burgess, S., Gardiner, K., & Propper, C. (2006). School, Family and County Effects on Adolescents' Later Life Chances. *Journal of Family and Economic Issues*, *27*(2), 155–184.

CACI Limited (2014). The ACORN User Guide – The Consumer Classification. London: www.acorn.caci.co.uk/downloads/Acorn-User-guide.pdf.

Culliney, M. (2016). Escaping the rural pay penalty: location, migration and the labour market. *Work, Employment & Society*. doi:10.1177/0950017016640685.

Dietz, R. D. (2002). The estimation of neighborhood effects in the social sciences: An interdisciplinary approach. *Social Science Research*, *31*(4), 539–575.

Experian Limited. (2009). Experian's Mosaic Public Sector citizen classification for the United Kingdom. www.esds.ac.uk/doc/5738/mrdoc/pdf/5738_mosaicpublicsector_info_2010.pdf.

Friedrichs, J., Galster, G. C., & Musterd, S. (2003). Neighbourhood effects on social opportunities: The European and American research and policy context. *Housing Studies*, *18*(6), 797–806.

Galster, G. C. (2008). Quantifying the effect of neighbourhood on individuals: Challenges, alternative approaches and promising directions. *Journal of Applied Social Sciences Studies*, *128*(1), 7–48.

Knies, G. (2015). *Understanding Society – UK Household Longitudinal Study: Wave 1–5, 2009–2014, User Manual* (5 ed. Vol. 1). Colchester: University of Essex.

Knies, G., Burgess, S., & Propper, C. (2008). Keeping up with the Schmidts: An empirical test of relative deprivation theory in the neighbourhood context. *Journal of Applied Social Sciences Studies*, *1*(2008).

Knies, G., Nandi, A., & Platt, L. (2016). Life satisfaction, ethnicity and neighbourhoods: Is there an effect of neighbourhood ethnic composition on life satisfaction? *Social Science Research* (60: 110–124), doi:10.1016/j.ssresearch.2016.01.010.

Lynn, P. L., & Knies, G. (2015). Understanding Society Quality Profile. In P. L. Lynn & G. Knies (Eds.), *Understanding Society Quality Profile* (Vol. 1). Colchester: ISER University of Essex.

Musterd, S., & Andersson, R. (2006). Employment, social mobility and neighbourhood effects: The case of Sweden. *International Journal of Urban and Regional Research*, *30*(1), 120–140.

Office for National Statistics. (2015, 25 June 2015). Mid-year population estimates for the UK 2014. *Population estimates* Retrieved 11 October, 2016.

Office for National Statistics. (2016a). 2001 area classifications. http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/ns-area-classifications/index/index.html.

Office for National Statistics. (2016b). 2001 Rural-urban classification. http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/rural-urban-definition-and-la/index.html.

Overman, H. G. (2002). Neighbourhood effects in large and small neighbourhoods. *Urban Studies*, *39*(1), 117–130.

Plum, A., & Knies, G. (2015). Does Neighbourhood Unemployment Affect the Springboard Effect of Low Pay? *ISER Working Paper, 11/2015*.

Propper, C., Jones, K., Bolster, A., Burgess, S., Johnston, R., & Sarker, R. (2005). Local neighbourhood and mental health: Evidence from the UK. *Social Science & Medicine*, *61*(10), 2065–2083.

Shields, M. A., Price, S. W., & Wooden, M. (2009). Life satisfaction and the economic and social characteristics of neighbourhoods. *Journal of Population Economics*, *22*(2), 421–443.

University of Essex. Institute for Social and Economic Research. (2010). British Household Panel Survey: Waves 1–18, 1991–2009 [computer file]. *18th Edition.* UK Data Service. SN: 5151, 10.5255/UKDA-SN-5151-1.

University of Essex. Institute for Social and Economic Research (2015a). *Understanding Society: Waves 1–5, 2009–2014*. [data collection]. *7th Edition.* UK Data Service. SN: 6614, 10.5255/UKDA-SN-6614-7.