Belonging to the Neighbourhood, Residential Mobility, and the Transition to Parenthood

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Abstract

Previous research shows that individuals often move in anticipation of parenthood, potentially rupturing local social connections in the process. However, local connections, familiarity, and emotional investment in the local area give individuals a sense of belonging. Thus, a stronger reported sense of belonging to the neighbour is indicative of stronger local social ties, well-being, a sense of security, and emotional investment. We hypothesise that a stronger sense of belonging is associated with a higher likelihood of having a first child, especially for recent movers, long-distance movers, and those living in urban centres. We employ the United Kingdom Household Longitudinal Survey (2009-2022) and utilise multilevel logit regression. In our preliminary results, we observe, that a stronger sense of belonging to the neighbourhood is associated with a higher likelihood of becoming a parent. We find that the sense of belonging moderates the relationship between recent residential moves and parenthood. Individuals living in large urban areas are more likely to become parents if they have a stronger sense of belonging. These findings suggest that beyond objective measures of geographic place, the subjective feeling of belonging to the neighbourhood plays a role in the transition to parenthood.

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Introduction

The age at first birth continues to rise throughout low-fertility countries. In the United Kingdom (UK) the age of first birth for women peaked at 29.1 years in 2020, following decades-long trends of increasingly delayed parenthood (Human Fertility Database, 2023). The delay in transition to parenthood is linked to stretching out of young adulthood and delays in precursory life transitions. Taking a life course perspective helps one understand how the different constituent parts of life trajectories (timing, linked lives, agency, historical time, and geographic place) interact (Elder et al., 2003). In fertility studies, geographic place has possibly received the least attention. However, our physical surroundings and the people that occupy them directly impact our lives. Residential mobility occurs most frequently in the young adult period, often in pursuit of educational and career opportunities (W. A. Clark, 2021). Particularly in the UK, for higher educated individuals, this often involves moving to expensive urban centres with large concentrations of jobs. However, these dense urban areas may not provide adequate, affordable dwellings, inducing secondary moves in preparation for parenthood. Each residential move out of the neighbourhood disrupts local social networks and changes how individuals interact with the space around them. Therefore, geographic place is not just about the physical surroundings but also the people and communities that inhabit them. That is to say, individuals may live in neighbourhoods with similar objective characteristics and have a different subjective connection to the neighbourhood.

One way to examine the subjective connection to the local area is by asking about the sense of belonging to the neighbourhood. Belonging is a useful concept as it is intuitively understood and highly valued (Buonfino & Thomson, 2007). As Antonsich (2010) notes, belonging is in actuality two related but distinct concepts: place belongingness and the politics of belonging. The first aspect, place belongingness, involves the sense of being ‘at home’ in a specific place and the associated feelings of comfort, security, familiarity, and stability (Savage et al., 2004). The question of where we belong is an integral part of self-formation, connecting identity and geography (Antonsich, 2009). However, living in or being from a place is not enough to form a strong sense of belonging. The geographical area must also provide enough (access to) resources to be functional. Thus, the second aspect, the politics of belonging, is the access to resources through socio-spatial inclusion (Antonsich, 2010). Insiders have access to social resources, increasing their sense of belonging, while outsiders face exclusion. Without the associated sense of security and social cohesion, young couples may not feel like their geographic place is sufficient to enter parenthood.

Even if individuals have strong ties to the neighbourhood, their current housing situation may be inadequate for family formation. Previous research shows that couples make residential moves in anticipation of parenthood (Ermisch & Steele, 2016). In the UK, this is often a process of moving from the urban core to surrounding suburban and exurban areas (Kulu et al., 2009). Soon-to-be parents face the trade-off between maintaining local social ties and the type of housing and neighbourhood amenities like nurseries, schools, security, and green space. Belonging to the

neighbourhood increases with the time in the current residence (W. A. Clark & Coulter, 2015), raising the social cost of residential moves and encouraging individuals to stay (Belot & Ermisch, 2009). The optimum might be short-distance moves that allow couples to fulfil their housing preferences while maintaining a sense of belonging. This is not always possible due to constraining factors at both the individual and structural levels. A stronger sense of belonging to the neighborhood may therefore moderate the relationship between parenthood and residential mobility in two ways. First, it is a sign that recent movers have found a place in which they feel at home and started the process of building local social networks. Second, the benefits of belonging to a neighborhood might signify that those households that are not able to move homes feel secure enough in the area they live in even if the dwelling is suboptimal.

We aim to explore the nexus between the sense of belonging to the neighbourhood, residential mobility, and entry to parenthood. We ask "how does a stronger sense of belonging in the neighbourhood associate with the transition to parenthood?" To explore this question, we employ the United Kingdom Household Longitudinal Survey (2009-2022) which includes questions about neighbourhood cohesiveness, residential moves, and life histories. Building on previous studies, we hypothesise that a stronger sense of belonging is positively associated with a higher likelihood of first birth. Since the sense of belonging increases with time in the current residence, we ask "How is this relationship different for those that have recently moved and does it depend on the distance of the last move?" We interact the sense of belonging with the time in current residence and the distance of the last move to examine if the sense of belonging to the enighbourhood moderates the relationship between residential mobility and the transition to parenthood. Finally, we ask "How does the relationship between belonging to the neighbourhood and the transition to parenthood depend on the level of urbanicity?" We hypothesise that a stronger sense of belonging is more important for adulthood for individuals living in large urban centres.

Data and Measures

Starting in 2009, Understanding Society (formally known as the United Kingdom Household Longitudinal Study) is a yearly panel survey focusing on households and family issues (University of Essex, 2020). Understanding Society collects a sample of all four constituent countries using a clustered and stratified, probability approach (Lynn, 2009) with households continuing from the British Household Panel Survey and ethnic minority boosts added in subsequent waves. After an attrition of about 15% from wave one to wave two, most waves have an average of less than 2% attrition. Understanding Society is generally representative of UK society (Benzeval et al., 2020), and post-stratification weights are provided for dealing with survey design, non-response, and attrition (Platt et al., 2020). One major cause of attrition in panel data is families, especially young parents, changing residential locations. The survey designers of Understanding Society gave particular attention to the issue of attrition due to young people, separations, and moving homes

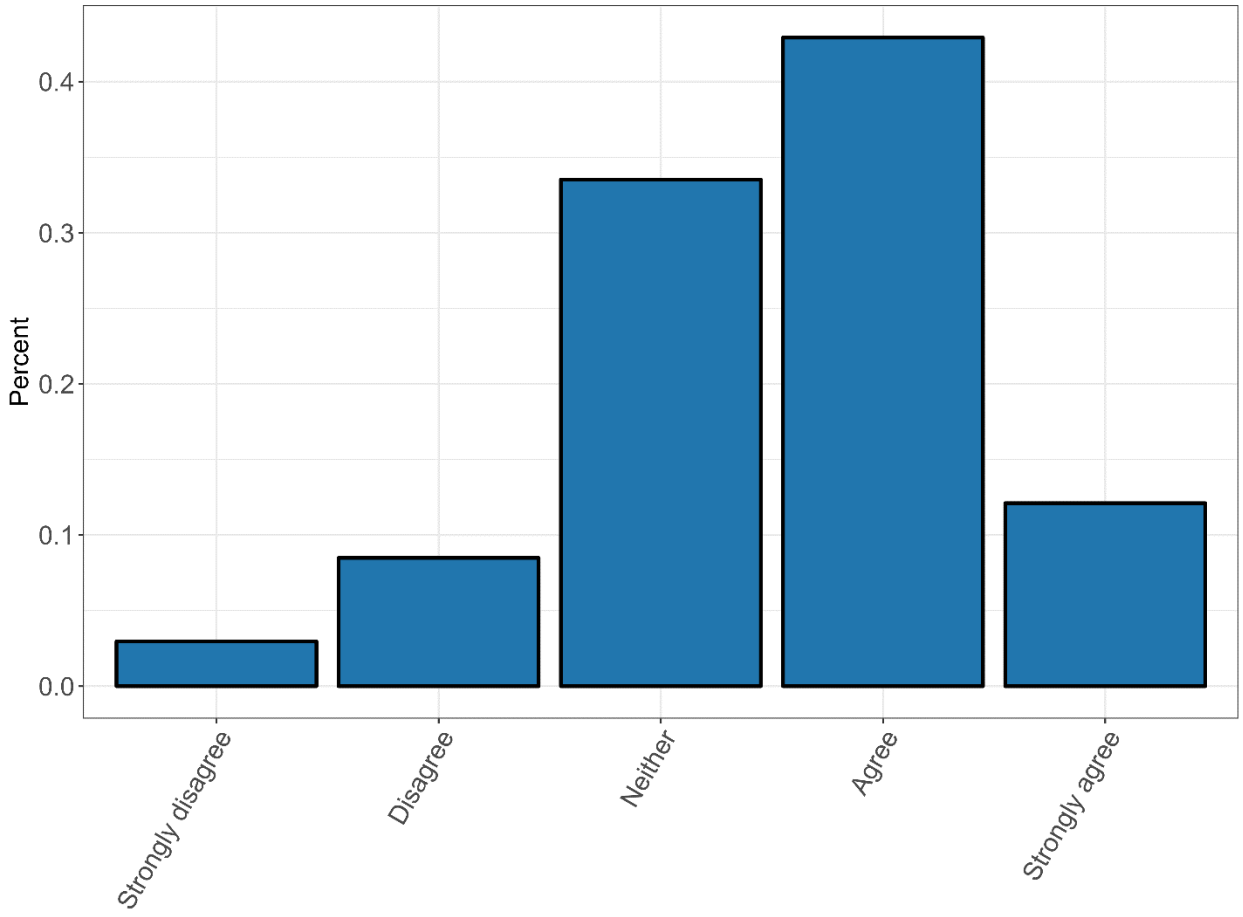
(Mitchell et al., 2015). The survey uses flexibility in the mode and timing of the survey to lower the risk of non-participation due to the recent birth of a child and moving home.

Our analytical sample includes all childless, partnered individuals of childbearing age (18-45) in survey waves in which questions about neighbourhood cohesion were asked (1, 3, 6, & 9) using consecutive waves to capture first birth events in the intermediate period. We selected partnered individuals since partnership formation, a sense of belonging in the neighbourhood, and cohabitation are correlated. The final sample includes 11,344 individuals (5,490 women and 5,854 men) for a total of 16,798 respondent-wave observations.

Dependent variable. Our study focuses on the likelihood of a first birth event in the discrete period following the interview. The dependent variable is coded as 1 for individuals who experience the live birth of their first child or 0 if not. The individual sample includes 1,476 first birth events. The frequencies of variables are presented in Table 1.

Explanatory variables. To study our research questions, we utilise a question about how much the respondents perceive that they *belong to the neighbourhood.* Understanding Society asks respondents to react to a set of statements about their relationship to the neighbourhood in five waves (1, 3, 6, 9), and 12. The respondents evaluate the statement on a five-point Likert scale from strongly disagree (1) to strongly agree (5). We select the statement *I feel like I* ***belong*** *to this neighbourhood*. This is one part of the question block for the Neighbourhood Cohesion Index (Buckner, 1988) created to evaluate local social cohesion or a sense of belonging and interaction in a neighbourhood. Studies examining this index show external validity between neighbourhood characteristics and perceived social cohesion in the UK (McCulloch, 2003; Pevalin & Rose, 2003). Figure 1 displays the distribution of responses in the analytical sample. The analytical sample means of *belong to the neighbourhood* by each control variable are listed in Table 1.

Figure 1: Distribution of Belong to the Neighbourhood in the full analytical sample.



The relationship between the transition to parenthood and the sense of belonging to the neighbourhood depends on the time in the current residence. To capture recent moves, we create a binary indicator of whether the respondent has changed dwellings in the previous four years. Distance also plays a role with shorter residential moves having a smaller penalty in the sense of belonging to the neighbourhood than longer moves. However, the penalty for longer moves should also decrease over time. The distance moved is only calculated starting in wave three. For the moving distance to be calculated the respondent must have a valid postcode in consecutive waves from wave two onwards. The calculation relies on the latitude and longitude of the central point of the respondent's home postcode, employing Vincenty's equation to determine the geodetic distance. The median residential move in the analytical sample is about four kilometres. We categorise observations into three groups: *Recent, more than 4 kilometres, Recent, less than 4 kilometres,* and *Long-term resident*. 5,552 observations are dropped due to the missing distance of the last move. We also do not include observations from wave 1 since we do not have data on the distance of moves during that wave. This leaves us with a sample of 11,246 observations.

To explore the role of urbanicity in the relationship between belonging to the neighbourhood and the transition to parenthood, we use the linked Lower Super Output Area (LSOA) data to classify each neighbourhood following the Office for National Statistics 2011 rural/urban classification guide (Office for National Statistics, 2023). Since Scotland and Northern Ireland use slightly different classification schemes, we limit our sample to England and Wales (14,605 observations). We classify urban areas with major (A1) or minor (B1) conurbations as *Large urban.* Urban city and town (C1) and urban city and town in a sparse setting (C2) are classified as *City/Town* and all rural areas (D1, D2, E1, and E2) are classified as *Rural area*. We control for urbanicity in other model runs using a derived variable available in Understanding Society that splits the classification by the larger urban/rural divide, available for all four constituent countries.

Controls. All models control for sex, age (categorical and quadratic), survey wave, parent's distance, desire to move homes, life satisfaction, partnership status, activity status, education, and housing tenure. Parent's distance is measured as the reported time to the closest parent measured as less than 30 minutes, more than 30 minutes, or unknown (parents deceased or not distance not reported). Partnership includes if they are married (including civil partnerships) or cohabitating. Activity status includes if they are employed, unemployed, inactive, or a student. We use the ISCED-97 to categorise educational attainment as low (ISCED-97 1-2), medium (ISCED-97 3-4), and high (ISCED-97 5-6). Housing tenure is categorised as owned, private rent, or social rent. Life satisfaction is measured on a 7-point Likert scale.

Table 1: Summary statistics for the analytical samples.

	Full Analytical Sample N= 16,798		**Distance moved** N= 11,246	**Urbanicity** N= 14,605
	Count (%)	Belonging: Mean (SD)	Count (%)	Count (%)
Belong to the neighbourhood		**3.53 (0.91)**		
First Birth Event				
Yes	1,476 (8.8%)	3.58 (0.87)	990 (8.8%)	1,307 (89%)
No	15,322 (91.2%)	3.52 (0.92)	10,256 (91.2%)	13,298 (91.1%)
Recent move				
Less than 4 years	9,530 (56.4%)	3.45 (0.92)		8,333 (57.1%)
More than 4 years	7,371 (43.6%)	3.63 (0.90)		6,272 (42.9%)
Distance moved				
Recent, more than 4 kilometres		3.34 (0.94)	1,944 (11.6%)	
Recent, less than 4 kilometres		3.45 (0.90)	1,964 (11.7%)	
Long-term resident		3.63 (0.90)	7,338 (65.2%)	
Urbanicity				
Rural	3,055 (18.2%)	3.70 (0.89)	2,161 (19.2%)	
Urban	13,743 (81.8%)	3.49 (0.92)	9,085 (80.8%)	
Urbanicity LSOA				
Rural area				1,968 (13.4%)
Large urban				6,320 (43.3%)
City/Town				6,317 (43.3%)
Parent's distance				
Less than 30 minutes	7,102 (42.1%)	3.58 (0.89)	4,927 (43.8%)	5,863 (40.1%)
More than 30 minutes	7,055 (41.7%)	3.47 (0.93)	4,688 (41.7%)	6,288 (43.1%)
Unknown	2,739 (16.2%)	3.54 (0.93)	1,631 (14.5%)	2,454 (16.8%)
Desire to move homes				
Yes	6,760 (40.0%)	3.28 (0.97)	4,717 (41.9%)	5,979 (40.9%)
No	10,038 (60.0%)	3.69 (0.84)	6,529 (58.1%)	8,626 (59.1%)

	Full Analytical Sample N= 16,798		Distance moved N= 11,246	Urbanicity N= 14,605
	Count (%)	Belonging: Mean (SD)	Count (%)	Count (%)
Sex				
Women	8,773 (52.2%)	3.55 (0.92)	5,942 (52.8%)	7,589 (52.0%)
Men	8,025 (47.8%)	3.51 (0.90)	5,304 (47.2%)	7,016 (48.0%)
Age				
18-24	1,820 (10.8%)	3.36 (0.97)	1,010 (9.0%)	1,622 (11.1%)
25-29	3,664 (21.8%)	3.42 (0.92)	2,181 (19.4%)	3,259 (22.3%)
30-34	3,652 (21.7%)	3.48 (0.92)	2,343 (20.8%)	3,269 (22.4%)
35-39	3,235 (19.3%)	3.62 (0.89)	2,288 (20.3%)	2,840 (19.4%)
40-45	4,427 (26.4%)	3.67 (0.87)	3,424 (30.4%)	3,615 (24.8%)
Survey wave				
Wave 1	3,875 (23.1%)	3.46 (0.93)		3,497 (23.9%)
Wave 3	4,940 (29.4%)	3.55 (0.88)	4,404 (39.1%)	4,002 (27.4%)
Wave 6	5,020 (29.9%)	3.59 (0.91)	4,096 (36.4%)	4,468 (30.6%)
Wave 9	2,963 (17.6%)	3.47 (0.96)	2,745 (24.5%)	2,638 (18.1%)
Partnership status				
Cohabitation	6,942 (41.3%)	3.42 (0.92)	4,227 (37.6%)	6,109 (41.8%)
Married	9,856 (58.7%)	3.61 (0.90)	7,019 (62.4%)	8,496 (58.2%)
Activity status				
Employed	14,010 (83.4%)	3.53 (0.90)	9,526 (84.7%)	12,173 (83.3%)
Unemployed	944 (5.6%)	3.47 (1.02)	541 (4.8%)	838 (5.7%)
Inactive	1,384 (8.2%)	3.56 (0.98)	900 (8.0%)	1,195 (8.2%)
Student	460 (2.7%)	3.40 (0.97)	279 (2.5%)	399 (2.7%)
Educational attainment				
Low	4,735 (28.2%)	3.55 (0.91)	3,148 (28.0%)	4,063 (27.8%)
Medium	3,029 (18.0%)	3.53 (0.90)	2,044 (18.2%)	2,567 (17.6%)
High	9,034 (53.8%)	3.52 (0.92)	6,054 (53.8%)	7,975 (54.6%)
Housing tenure				
Owned	10,388 (61.8%)	3.59 (0.88)	7,307 (65.0%)	8,874 (60.6%)
Private rent	4,495 (26.8%)	3.40 (0.96)	2,691 (23.9%)	4,107 (28.1%)
Social rent	1,915 (11.4%)	3.48 (0.98)	1,248 (11.1%)	1,651 (11.3%)

Within our sample, the unadjusted mean sense of belonging to the neighbourhood is 3.53, putting the score halfway between individuals stating they "neither agree/disagree" and "agree" (Table 1). However, the mean sense of belonging varies within our dependent and control variables. We notice that in observations in which a first birth event occurs, respondents report a higher mean sense of belonging, although a Welch Two Sample t-test reports a p-value around 0.05, suggesting that there is not a large statistical difference. Unadjusted individuals who are older, married, employed, homeowners, or residing in rural areas also have higher mean sense of belonging. The lowest mean sense of belonging are renters (both private and social), young individuals (ages 18-24), and individuals reporting that they desire to move homes. Welch Two Sample t-test and Pearson's Chi-squared test confirm that within the variables desire to move, age, partnership status, housing tenure, and urbanicity, the sense of belonging is different enough to have p-values below the standard 0.05 to signify statistical difference. We do not find a statistically significant difference between educational attainment and sex.

Analytical Strategy

We estimate the likelihood of the birth of the child through a multilevel logit regression model with a random effect to account for within-individual variance. The data is organised in person-period format with each observation representing a survey wave.

We estimate the following models:

$First\ birth_i = \boldsymbol{\theta} Belong\ to\ the\ neighbourhood_i + \gamma \boldsymbol{X}_i + \mu_i + \varepsilon_i$	(1)
$First\ birth_i = \boldsymbol{\theta} Belong\ to\ the\ neighbourhood_i *$ Recent move$_i + \gamma \boldsymbol{X}_i + \mu_i + \varepsilon_i$	(2)
$First\ birth_i = \boldsymbol{\theta} Belong\ to\ the\ neighbourhood_i * Distance\ moved_i + \gamma \boldsymbol{X}_i + \mu_i + \varepsilon_i$	(3)
$First\ birth_i = \boldsymbol{\theta} Belong\ to\ the\ neighbourhood_i * Urbanicity_i + \gamma \boldsymbol{X}_i + \mu_i + \varepsilon_i$	(4)

X represents the vector of time-varying and time-constant controls. The outcome variable is the probability of the first live-born child in the period following the interview. Observations are clustered at the individual level using a random effect denoted by μ_i. We note that we are capturing the probability of a first birth event within a discrete period following the previous interview, and not the overall probability of birth. Model 2 interacts belong to the neighbourhood with the binary variable recent move. Model 3 interacts belong to the neighbourhood with the categorical variable distance moved. Finally, Model 4 interacts belong to the neighbourhood with the categorical variable of urbanicity for the subsample of England and Wales. We present our results as odds ratios. The interaction terms are presented graphically as predicted probabilities for ease of interpretation.

Preliminary Results

We observe that a stronger sense of belonging to the neighbourhood is positively associated with having a first birth in the period following the interview (1.096*; Model 1, Table 2). This result holds even after controlling for a various number of socioeconomic and demographic characteristics. However, the size of the coefficient suggests that the relationship is modest. The results of the covariate *recent move* indicate that there is a strong positive association between recent residential moves and the transition to parenthood (1.791***; Model 1, Table 2). This result reflects the literature with residential moves, especially of younger partnered individuals, often being anticipatory of parenthood.

Table 2: Individuals. Selected results of multilevel logit regression. Odds ratios.

First Birth Event	**Full Model**	**Recent move**	**Distance moved**	**Urbanicity**
	(1)	(2)	(3)	(4)
Belong to the neighbourhood	1.096*	0.984	1.027	1.183*
	(0.051)	(0.080)	(0.082)	(0.094)
Recent move				

Ref. More than 4 years				
Less than 4 years	1.791***	1.035		1.841***
	(0.170)	(0.366)		(0.185)
Belong*Less than 4 years		1.174*		
		(0.112)		
Distance moved				
Ref. Long-term resident				
Recent, less than 4km			1.355	
			(0.649)	
Recent, more than 4km			0.560	
			(0.271)	
Belong*Less than 4km			1.228	
			(0.161)	
Belong*More than 4km			1.433**	
			(0.189)	
Urbanicity				
Ref. Rural area				
Large Urban				0.460
				(0.241)
City/Town				0.649
				(0.326)
Belong*Large urban				1.151
				(0.161)
Belong*City/Town				1.038
				(0.141)
Number of Obs.	16,798	16,798	11,246	14,605
Pseudo-R2 (fixed effect)	0.233	0.231	0.265	0.218
Pseudo-R2 (total)	0.429	0.447	0.439	0.440

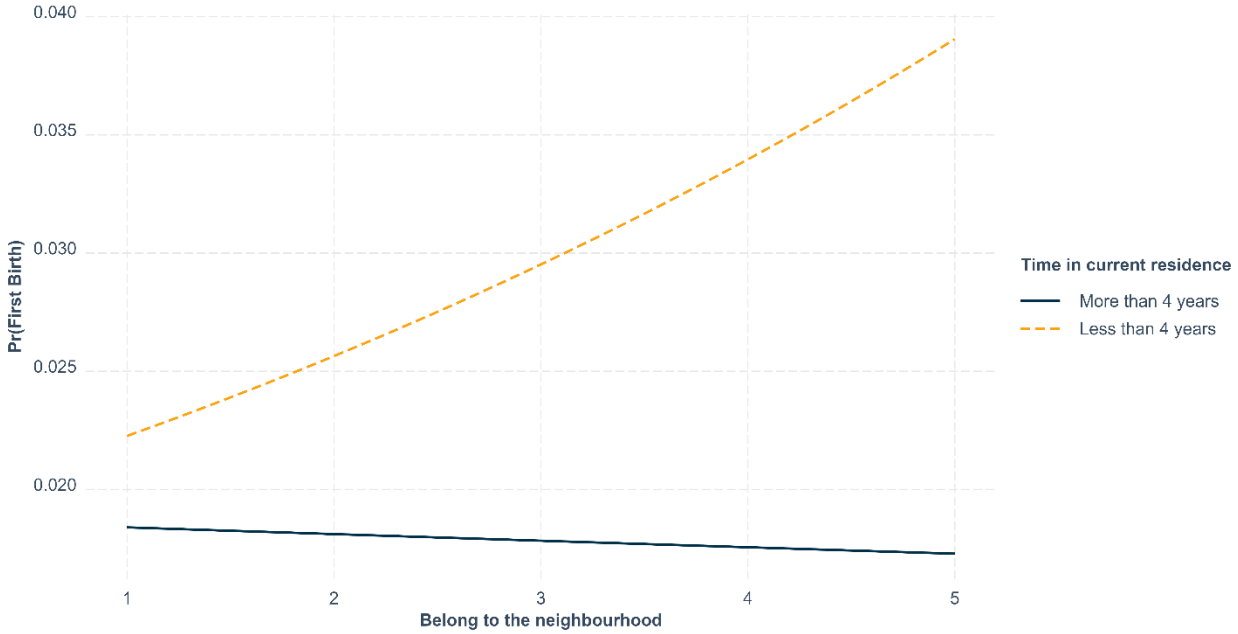
+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Note: Data from UKHLS. Weighted. The models control for sex, age, age-squared, survey wave, life satisfaction, partnership status, activity status, educational attainment, housing tenure, parent's distance, and the desire to move. Full results are available in the appendix (Table A1).

Since the sense of belonging to the neighbourhood increases with the time in the current residence but recent moves are positively associated with parenthood, we examine how belonging moderates the relationship between time in the current residence and the transition to parenthood using an interaction term. We find that the interaction is positive and statistically significant (1.174*; Table 1, Model 2). This suggests that for respondents living in their current dwelling for less than four years, a stronger sense of belonging to the neighbourhood moderates the relationship between the time in the current residence and the transition to parenthood. We illustrate this using predicted probabilities in Figure 2. For respondents living in their current residence for more than four years, we observe no change in the predicted probabilities with an increase in the sense of belonging to

the neighbourhood, demonstrated by the nearly flat line. On the other hand, the predicted probability of having a first child for respondents living in their current residence for less than four years increases as the sense of belonging to the neighbourhood increases. For recent moves, each discrete step towards a stronger sense of belonging to the neighbourhood increases the predicted probability of transition to parenthood. For example, a respondent who states that they *agree* with the statement "I feel like I belong to this neighbourhood" has just under 0.5% higher predicted probability of becoming a parent than a respondent who says they *neither agree nor disagree* (Figure 2). While this increase is relatively modest, it signifies that the sense of belonging moderates the relationship between residential mobility and parenthood.

Figure 2: Probability of the birth of a first child. Interaction term of belong to the neighbourhood and time in current residence. Predicted probabilities.

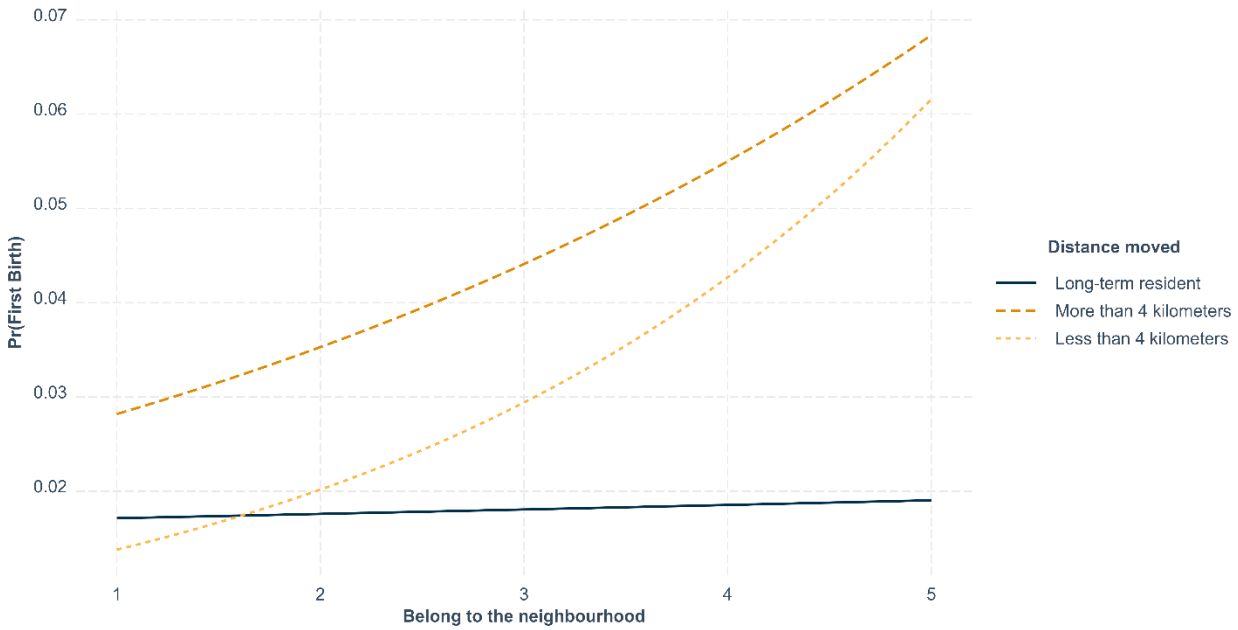


Note: Data from UKHLS. Weighted. Figure 2 corresponds to Table 1, Model 2. The model controls for sex, age, age-squared, survey wave, life satisfaction, partnership status, activity status, educational attainment, housing tenure, parent's distance, the desire to move, and urbanicity.

Since there is a trade-off between severing local social networks and residential mobility in search of adequate dwelling for parenthood, individuals may seek to stay in their local area when feasible. Short-distance dwelling relocation is therefore unique, in terms of its relationship with belonging and parenthood than longer distance moves. We study this effect using an interaction term with the categorical variable *distance moved* which includes both the time in current residence and if the move was further than four kilometres (Table 1, Model 3). The interaction terms for recent movers, both short and long distance, are positive, reflecting the finding from Model 2. However, we note that the interaction term is only statistically significant for respondents that move further than four kilometres (1.433**; Table 1, Model 3). This suggests that belonging plays a stronger

moderating role for respondents who likely have less contact with the local social network from their previous residence. We illustrate the interaction term in Figure 3. Similar to Figure 2, respondents who moved in the previous four years have a higher predicted probability of transition to parenthood. However, within the group of recent moves, we see that residential moves of less than four kilometres have a larger predicted probability of first birth than respondents that moved further than four kilometres. Both groups have an increased predicted probability of having their first child as the sense of belonging increases. The gap in predicted probabilities slightly decreases as the sense of belonging increases for these groups. However, it appears that the basic relationship that a stronger sense of belonging is positively associated with the transition to parenthood for recent movers is largely similar between short- and long-distance moves.

Figure 3: Probability of the birth of a first child. Interaction term of belong to the neighbourhood and distance moved. Predicted probabilities.

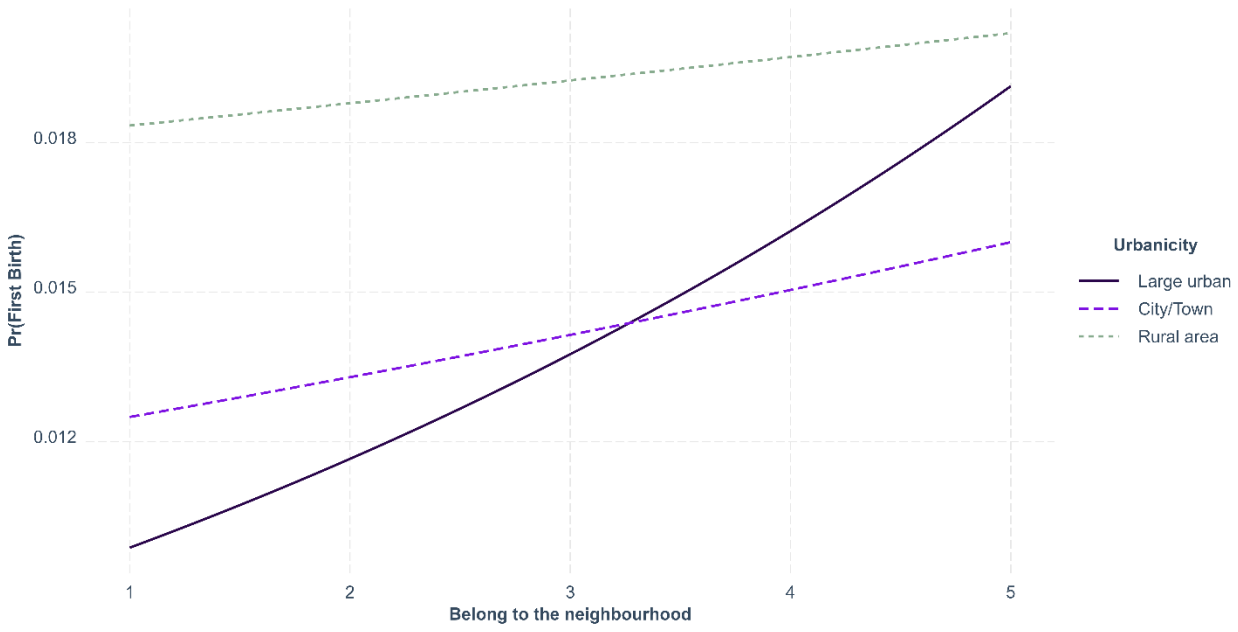


Note: Data from UKHLS. Weighted. Figure 3 corresponds to Table 1, Model 3. The model controls for sex, age, age-squared, survey wave, life satisfaction, partnership status, activity status, educational attainment, housing tenure, parent's distance, the desire to move, and urbanicity.

Finally, we observed in Model 1 (Table A1) that living in an urban area is negatively associated with a transition to parenthood, reflecting previous results in the UK. However, the level of urbanicity might play a role. We refine the classification by stratifying urban into large urban areas and cities/towns by using the LSOA for England and Wales. We find that the interaction term for observations in large urban areas is positive (1.151; Table 1, Model 4) signifying that a stronger sense of belonging to the neighbourhood moderates some of the negative association between living in an urban area and the transition to parenthood. However, the size of the interaction term for observations in smaller cities and towns is close to showing no positive relationship (1.038;

Table 1, Model 4) suggesting there is not a large moderation effect in smaller urban areas. We illustrate this in Figure 4. Individuals living in rural areas have a higher predicted probability of transition to parenthood regardless of the sense of belonging to the neighbourhood. Observations in cities and towns have a lower predicted probability of having a first child. In both geographic areas, there is only a modest increase in predicted probabilities with an increase in the sense of belonging. On the other hand, the slope of the predicted probabilities for observations in large urban areas is much steeper. For individuals in areas with high levels of urbanicity, it appears that a stronger sense of belonging to the neighbourhood moderates some of the negative associations with living in a densely populated area. We note, however, that these predicted probabilities a relatively modest with an increase of just over 1.0% for individuals in large urban areas from the lowest to the highest sense of belonging. We note, however, that these predicted probabilities are relatively modest with an increase of just over 1.0% for individuals in large urban areas from the lowest to the highest sense of belonging.

Figure 4: Probability of the birth of a first child. Interaction term of belong to the neighbourhood and urbanicity in England and Wales. Predicted probabilities.



Note: Data from UKHLS. Weighted. Figure 4 corresponds to Table 1, Model 4. The definition of urban/rural follows the Office for National Statistics for Lower Super Output Areas for England and Wales. The model controls for sex, age, age-squared, survey wave, life satisfaction, partnership status, activity status, educational attainment, housing tenure, parent's distance, the desire to move, and time in current residence.

Conclusions

In this article, we examine how the sense of belonging to the neighbourhood is associated with the transition to parenthood. We find that a stronger sense of belonging to the neighbourhood is positively associated with the birth of the first child. This provides evidence to our hypothesis that local belonging proxies attachment to the community, a sense of security and stability, social support, and information exchange; these are things that aid in the preparation for the transition to parenthood. However, the positive association is relatively modest, suggesting that after controlling for sociodemographic characteristics, belonging to the neighbourhood plays a small role.

Our moderation analysis indicates that belonging to the neighbour moderates the relationship between residential moves and the transition to parenthood. The transition to parenthood for recent movers depends on their subjective sense of belonging to the neighbourhood in two ways. First, individuals who move homes sever or reduce ties with their local networks from their previous residential location. A stronger reported sense of belonging signifies that they have had a relatively smooth transition into establishing local social ties in the new residential location in a relatively short period. Thus, for individuals with a stronger sense of belonging in their new neighbourhood, the residential relocation may have improved the objective characteristics of the dwelling (e.g. ownership, space, size, amenities) without large negative effects on having a local social network. Second, a stronger sense of belonging can signify an emotional investment in the neighbourhood. When individuals have found a place in which they want to settle down they may make more of an effort to get to know the community. Settling down signifies an individual's emotional preparation for parenthood. Surprisingly, we do not find a large difference for households depending on the distance moved. While short-distance movers might not have a drop off in belonging to the neighbourhood that long-distance movers have due to the proximity of local social connections, the moderating effect of a stronger sense of belonging to the neighbourhood applies equally to both groups. For long-term residents, there may simply be too little variation in the sense of belonging to have a significant moderation effect. Furthermore, younger long-term residents are likely a distinct group that differs in socioeconomic terms from young couples who are residentially mobile.

Finally, we observe a stronger sense of belonging moderates the relationship between living in large urban areas and the transition to parenthood. Traditionally, living in dense urban areas is associated with a lower chance of having a first child in the UK. Having a stronger sense of belonging to the neighbourhood likely signifies that individuals live in an area where they feel secure enough to become a parent. It is also possible, for individuals living in large urban areas that do not have the opportunity, due to employment, housing, or financial restriction, to leave the area. They overcome these limitations by becoming more emotionally invested in the neighbourhood. In other words, they settle for what they have. Since areas of higher deprivation are associated with a lower sense of belonging, it is also possible that individuals living in large

areas report a higher sense of belonging and living in less deprived areas. We do not consider deprivation in this study. The association between deprivation, belonging, and parenthood is an avenue of future study.

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Appendix

Table A1: Results of multilevel logit regression. Odds Ratios.

First Birth Event	Full Model	Recent move	Distance moved	Urban/Rural
	(1)	(2)	(3)	(4)
Belong to the neighbourhood	1.096+	0.984	1.027	1.183*
	(0.051)	(0.080)	(0.082)	(0.094)
Timing in current residence				
Ref. Four years or more				
Less than four years	1.791***	1,035		1.841***
	(0.170)	(0.366)		(0.185)
Distance Moved				
Ref. Long-term resident				
Recent, less than 4 kilometres			1.355	
			(0.649)	
Recent, more than 4 kilometres			0.560	
			(0.271)	
Urbanicity				
Ref. Rural				
Urban	0.796*	0.788*	0.817	
	(0.082)	(0.082)	(0.101)	
Urbanicity LSOA				
Ref. Rural area				
Large urban				0.460
				(0.241)
City/Town				0.649
				(0.326)
Parent's distance				
Ref. Less than 30 minutes				
More than 30 minutes	0.850+	0.845+	0.829+	0.841+
	(0.075)	(0.076)	(0.088)	(0.080)
Unknown	0.663*	0.662*	0.704+	0.673*
	(0.113)	(0.114)	(0.145)	(0.121)
Desire to move homes				
Ref. No				
Yes	0.917	0.899	1.122	0.933
	(0.078)	(0.077)	(0.113)	(0.084)
Sex				
Ref. Men				
Women	0.859+	0.853+	0.865	0.851+
	(0.074)	(0.075)	(0.089)	(0.078)
Age				
Ref. 18-24				
25-29	1.233	1.213	1.267	1.215
	(0.212)	(0.211)	(0.271)	(0.222)
30-34	2.898***	2.882***	2.797**	2.958***
	(0.770)	(0.771)	(0.913)	(0.827)
35-39	2.550*	2.545*	2.161	2.513*
	(1.051)	(1.057)	(1.100)	(1.092)
40-45	1.280	1.281	1.102	1.310
	(0.776)	(0.782)	(0.820)	(0.834)
Age-squared	0.998***	0.998***	0.998***	0.998***
	(0.000)	(0.000)	(0.001)	(0.000)
Survey wave				
Ref. Wave 1				
Wave 3	1.097	1.098	*Ref.*	1.151
	(0.107)	(0.109)		(0.120)
Wave 6	0.999	1.000	0.939	1.036
	(0.119)	(0.120)	(0.136)	(0.131)
Wave 9	1.464**	1.460**	1.245	1.505**

First Birth Event	Full Model	Recent move	Distance moved	Urban/Rural
	(1)	(2)	(3)	(4)
	(0.196)	(0.197)	(0.203)	(0.214)
Partnership status				
Ref. Cohabitation				
Married	3.286***	3.330***	3.263***	3.225***
	(0.314)	(0.322)	(0.380)	(0.324)
Activity status				
Ref. Employed				
Unemployed	1.225	1.217	1.094	1.354
	(0.232)	(0.234)	(0.273)	(0.269)
Inactive	2.439***	2.452***	2.269***	2.375***
	(0.431)	(0.441)	(0.492)	(0.452)
Student	0.357**	0.359**	0.405*	0.302**
	(0.121)	(0.122)	(0.155)	(0.118)
Educational attainment				
Ref. Low				
Medium	0.795+	0.791+	0.748+	0.719*
	(0.104)	(0.105)	(0.117)	(0.101)
High	0.935	0.937	0.855	0.881
	(0.097)	(0.099)	(0.107)	(0.097)
Housing tenure				
Ref. Owned				
Private rent	0.594***	0.590***	0.573***	0.596***
	(0.062)	(0.062)	(0.073)	(0.065)
Social rent	1.137	1.126	1.231	1.096
	(0.166)	(0.167)	(0.212)	(0.174)
Life Satisfaction	1.107**	1.106**	1.112**	1.097**
	(0.037)	(0.037)	(0.045)	(0.038)
Belong*Recent move		1.174*		
		(0.112)		
Belong*Less than 4km			1.228	
			(0.161)	
Belong*More than 4km			1.433**	
			(0.189)	
Belong*Large urban				1,151
				(0.161)
Belong*City/Town				1,038
				(0.141)
Intercept	0.079***	0.114***	0.099***	0.046***
	(0.033)	(0.054)	(0.054)	(0.023)
Num.Obs.	16,798	16,798	11,246	14,605
AIC	5684.3	5673.5	3856.1	5175.7
Psuedo-R^2 (fixed effects)	0.233	0.231	0.265	0.218
Psuedo-R^2 (total)	0.429	0.447	0.439	0.440

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: Data from UKHLS. Weighted.