**Ethnicity and grandparental childcare in the UK**

**Abstract**

Caring for one’s grandchildren has become a more common experience for individuals partly as a result of a longer overlap between the lives of grandparents and their grandchildren. Existing research shows that around 50 per cent of grandparents engage in some grandparental childcare in most European countries, however this proportion is higher among older people with a migrant background, partly due to greater economic necessity among migrant families. Research has also highlighted ethnic differences in parents’ childcare selection, even after controlling for their socio-economic status. Building on these strands of work, this paper investigates the differences in the use of (grandparental) childcare among parents from different Black and Minority Ethnic (BME) groups in the UK, using data from Understanding Society. The results show that parents from Other White, Indian, Pakistani, Bangladeshi and African communities are less likely to use childcare than White British parents, while the opposite is true for Caribbean parents. However, among parents using childcare, individuals from the Other White, Caribbean, and African groups are less likely than the White British majority to be using grandparental childcare as a supplement to other childcare types, or on its own. Ethnic differentials in the use of childcare per se and grandparental childcare in particular, have significant policy implications, and may mask other kinds of ethnic differences.

**Keywords**: childcare; grandparent; ethnicity; minority ethnic groups; Understanding Society

**Introduction**

Increasing longevity has brought together an enlarged time span of overlap of grandparents’ lives with those of their grandchildren (Timonen and Arber 2012). Despite some differences in the frequency of engagement in grandparental childcare between countries, the literature has shown that the proportions of grandparents engaged in some grandparental childcare are around 50 per cent in European countries and the USA (Bordone *et al.* 2017; Hank and Buber 2009). Recent evidence has also pointed at an important role, within these countries, of the origin of grandparents. For example, Bordone and de Valk (2016) showed that grandparental childcare in Europe occurs significantly more often among parent-child dyads of migrant origin than is the case for the majority population. Acknowledging that grandparental childcare may represent both practical help and emotional-associational bonds, they interpret this result as a consequence of a greater economic necessity among migrant families, but they also recognise the role of family norms on raising children among different origins groups (*e.g.,* Kagitçibasi 2005; Treas and Mazumdar 2004). Other literature in this area has focused on ethnic differences in childcare selection (*e.g.*, Hofferth *et al.* 1994; Liang *et al.* 2000), highlighting that Black families in the USA are more likely to select childcare centres than families from other ethnic groups, even after controlling for the parents’ socio-economic status.

The parents’ choice of the type of childcare to be used, and the role of grandparental childcare in such arrangements, is determined by a range of factors which may relate to the existence of grandparents in the first place, as well as the children’s characteristics, in particular their age that might correlate with their type of needs. Studies consistently show that grandparent-provided childcare is less likely among children below age 1 (compared to children ages 1 or 2), more likely among preschool grandchildren (*e.g.*, Silverstein and Marenco 2001), and it generally decreases afterwards. Other potentially relevant demographic characteristics, such as the child’s gender, appear to be unrelated to grandparent caregiving. As it could be expected, the likelihood of caring decreases unambiguously with increasing geographic distance between the older and the younger generations, particularly so if regular grandchild care is considered (see Hank and Buber 2009 for a review).

Socio-economic and demographic characteristics at the parents´ level may also play a relevant role in determining the choice to make use of grandparental childcare. Younger parents are more likely to use grandparental childcare (*e.g.*, Baydar and Brooks-Gunn 1998; Vandell *et al.* 2003). Ambiguous evidence exists regarding the significance of education, single parenthood, and family income for using grandparental childcare (*e.g.*, Hank and Buber 2009; Kuhlthau and Mason 1996; Vandell *et al.* 2003).

Moreover, previous research has noted that grandparental childcare is positively associated with maternal employment (*e.g.*, Kuhlthau and Mason 1996; Vandell *et al.* 2003), being fundamental for women in enabling them to juggle family and work especially in countries where grandparents substitute (scarce) formal childcare (Aassve *et al.* 2012; Arpino *et al.* 2014; Geurts *et al.* 2015). However, distinguishing further between full-time and part-time employment does not appear to yield different results.

Against this background, this paper addresses the following research question: *are there ethnic differences in the use of grandparental childcare, after controlling for the mother’s participation in the labour market?*

The rest of the paper is structured as follows: evidence on the provision of grandparental childcare in the UK and Europe is discussed in the next section, followed by a consideration of the role of ethnicity in this area. The subsequent section provides an outline of the data and methodology used in the analysis. This is followed by the presentation of the results, with the final section critically discussing the findings of the paper and their implications for the design of social policies aimed at supporting parents and grandparents alike.

***The provision of grandparental childcare in the UK and Europe***

Grandparents often have an important role for their families, satisfying the need for childcare (Aassve *et al.* 2012; Arpino *et al.* 2014). In Europe, about 58% of grandmothers and 50% of grandfathers provide care to their grandchildren (see Glaser *et al.* 2010 for a review). Seen from the perspective of the middle generation, this means that only between 20 and 30 per cent of parents do not turn at all to grandparents to care for their own children (Bordone *et al.* 2017). Yet, despite this general common trend across Europe, countries differ in the extent to which grandparents care for their grandchildren. While the highest rate of grandparental engagement in Europe is found in Northern countries (Hank and Buber 2009), caregiving grandparents in Mediterranean countries look after their grandchildren more frequently, often on a daily basis (Hagestad 2006). In the UK, similarly to other Western European countries, grandparents generally play a complementary role to market (or public, *e.g.*, in Germany and the Netherlands) services, showing middle levels in both intensive and occasional childcare. In particular, 17 per cent of British grandparents with a grandchild under 16 provide intensive levels of childcare of at least ten hours a week and around one in thirty provides full-time care to a grandchild (Wellard 2011).

This heterogeneity in the role of grandparents as providers of childcare may relate to the policy context as well as to the institutional aspects of female labour force participation (Bordone *et al.* 2017). In the UK, public support for families is varied but less universal than in Nordic countries, and childcare coverage is often provided by the market. Moreover, one in four English grandparents aged 50 and over are in paid work, compared with an average of just one in seven across Europe. Only Denmark and Sweden have a higher percentage of working grandparents (Glaser *et al.* 2010). As noted by Arpino, Pronzato and Tavares (2014), grandparental childcare may depend on the grandparents’ willingness and ability to look after their grandchildren, but also on the parents’ preferences regarding the extent to which they wish to ‘externalise’ childcare, *i.e.* arrange for childcare to be provided outside the household and family context. In contexts with strong family ties and low employment rates, especially among women, a higher preference for the most internalised type of childcare (*i.e.*, women taking care of the children themselves) is observed. Women who participate in the labour market may either choose the next more internal childcare type, which may be grandparental childcare, or the most external type of (formal) childcare, which may be provided by the public or private sector. Although ‘social conventions’ of grandparenthood nowadays play a rather marginal role in the arrangements of grandparental childcare in comparison with ‘opportunity’ and ‘need structures’ in terms of, for example, young mothers’ employment (Silverstein *et al.* 2003), these preferences may also depend on cultural aspects linked to the cultural context and possibly ethnicity.

***The role of ethnicity in grandparental childcare provision***

The use of ethnicity as a distinguishing characteristic of individuals requires careful consideration. Wimmer (2008) defines an ethnic group as a group sharing common characteristics, such as religious affiliation, language and cultural norms, all of which distinguish a specific group from others, thereby denoting difference. Ethnicity is also related to other complex concepts which are largely self-determined, such as one’s race, nationality, migration history and heritage, as well as to the more formal concept of citizenship (Agarin 2014; Maas 2016; Piętka-Nykaza and McGhee 2016). As such, ethnicity may be conceptualised as one part of an individual’s identity – an approach favoured by psychologists; or as part of the broader social stratification through attaching particular outcomes to groups with particular characteristics – an approach which tends to be used by other researchers and by policymakers (Burton *et al.* 2008). Yet ethnicity, as Craig *et al.* (2012: 23) note, is not a characteristic that people ‘have’, rather it refers to “dynamic processes of self-identity and differentiation involving the negotiation of boundaries of inclusion and exclusion between groups [and] [t]hese boundaries are fluid and shift according to the context of social interaction and struggles over power and resources over time”. Such a dynamic, inclusive definition of ethnicity facilitates a broader understanding of how individuals’ minority ethnic status might be related to their choices about childcare, and how such choices might potentially set them apart from the majority population.

The use of ethnicity to distinguish groups of individuals who are different on one or more characteristics from the majority population is particularly important for the study of childcare arrangements made by working-age individuals. This is because ethnicity is directly related to the accumulation of experiences and resources for individuals across their life course (Phillipson 2015). In the case of minority ethnic populations, such an accumulation has, more often than not, pointed at a cultural, financial and social disadvantage, although critical differences exist both between the two genders and between individuals from different cohorts (*e.g.*, Vlachantoni *et al.* 2017). One’s ethnic background can help to unravel complex patterns and behaviours which can affect financial resources and outcomes across the life course and in later life (*e.g.*, Baldassar 2007; Evandrou 2000).

Academic literature has highlighted ethnic differences in terms of employment behaviour, economic resources, as well as patterns of informal care provision towards family members (Bécares *et al.* 2012; Evandrou 2000; Smith *et al.* 2000). In terms of employment, Vlachantoni et al. (2015) showed that 86 per cent of Indian men aged 25-59 are in paid work, compared to 68 per cent of Caribbean men in the same age group. Among women of the same age, 30 per cent of Pakistani and Bangladeshi women compared to 74 per cent of White British are in work. Once they are in work, individuals from most minority ethnic groups are more likely to be self-employed and to work part-time, which combine to result in lower earnings than their White counterparts (Pension Policy Institute (PPI) 2003). Ethnic differentials in paid work, which can directly affect individuals’ ability to pay for childcare, can interact with particular types of living arrangements and distinct cultural/religious values relating to the provision of care within the family. Evidence from the 2001 UK Census showed that the average household size among Bangladeshi families was 4.5 persons, followed by 4.1 among Pakistanis and 3.3 among Indians (ONS 2006), while overcrowding was more likely to be experienced in Bangladeshi compared to White British households (44 compared to six per cent). At the same time, literature shows that individuals from ethnic minorities are more likely to engage in informal care of family members than individuals from the White British community (Willis *et al.* 2013), while the role of grandparents is particularly important within transnational families spread across geographical boundaries (Lie 2010).

Drawing on the previous literature, our study explores similarities and differences in the use of childcare and, among those parent-child dyads using childcare, in their use of grandparental childcare (either in addition to other types of childcare or on its own).

Figure 1 outlines the conceptual framework of the research and proposes that an individual's use of childcare, which acts as a prerequisite for using grandparental childcare, may be determined by ethnicity. Other than on this factor, (grandparental) childcare may derive from a range of socio-demographic characteristics of the parents, such as education, marital status, income and activity status of the mother, as well as from characteristics of the child, including their age and number of siblings. An individual's use of grandparental childcare may be additionally determined by the availability of grandparents, in terms of their geographical distance. The variables used in this paper are explained in the next section in greater detail. Drawing on previous literature on cross-country differences in intergenerational contact being shaped by social norms (*e.g*., Bordone 2012), we acknowledge that the effect of ethnicity may be mediated through unobservable variables, *e.g.*, “culture” (norms, preferences and trust) which however we cannot measure.

(Figure 1 about here)

**Data and methods**

The paper uses data from Understanding Society, which is a nationally representative survey of more than 100,000 members of more than 40,000 households in the UK (University of Essex. Institute for Social and Economic Research, NatCen Social Research 2014; see also [https://www.understandingsociety.ac.uk/](https://www.understandingsociety.ac.uk/" \t "_blank)). The sample of Understanding Society used here includes the General Population (GP) and an Ethnic Minority Boost sample (EMB). The addresses of the sample were randomly selected from the Postcode Address File in Great Britain and the Land and Property Services Agency list of domestic properties in Northern Ireland. In each household, all individuals aged ten years and over were eligible for interview. Computer Aided Personal Interview was used to administer the household and individual adult questionnaires. The response rates for the GP and EMB were 82 and 73 per cent, respectively (Boreham *et al.* 2012). The analysis in this paper includes respondents from waves 1 to 5 (2009-2015), with available information about the use of childcare. In this survey, childcare is defined as care for the child carried out by anyone other than the parent and/or their partner. The survey asks parents about the usual arrangements for looking after their children during school term-time. While for younger children this would usually correspond to the care arrangements in school holidays, for school age children this question captures more regularly used forms of care, both formal or informal. For each child, we use the information on the three most used types of care.

In line with our conceptual framework (Figure 1), we first focus on whether or not the respondent uses childcare for their children. The analytical sample for the use of childcare includes 68,888 parent-child dyads, where parents are aged between 18-60 years old, were interviewed at least once over the five waves, and are responsible for at least one child below 15 years old (*i.e.*, they are “at risk” of using childcare). The threshold of 15 is defined in the data, as there is a specific question about being responsible for children aged 15 or less, and is comparable with existing research in this area (see Bordone *et al.* 2017). Among the total number of dyads, 12,492 dyads came from the five ethnic groups purposely recruited through the Ethnic Boost of the survey (Indian, Pakistani, Bangladeshi, Caribbean and African). In the second step of the analysis, where the use of grandparental childcare was explored, only those dyads who make use of (any) childcare and have provided information on such care, were included, totalling 25,145 dyads. An overview of the various types of childcare used by dyads using childcare is shown in Table 1. Since the same parent may be considered in more than one parent-child dyad and the same parent-child dyad may be included more than once in the sample (if interviewed in more than one wave), clustered standard errors were used (Cameron and Trivedi 2010). In a robustness check, the same models were run considering each parent-child dyad only at their first interview (N = 23,184 for the analysis of (any) childcare use; N = 7,891 for the analyses of grandparental childcare on the sub-sample using childcare. Results available on request from the corresponding author). As the results were very similar to those presented in the paper, we decided to keep the largest sample in order to increase the explanatory power of the analysis.

(Table 1 about here)

A set of logistic regressions was used in order to examine the factors associated with the use of any childcare, and specifically grandparental childcare, among the separate Black and Minority Ethnic (BME) groups. The binary dependent variables included the following:

1. Whether childcare (as defined above) is used for the child in the dyad;
2. Whether, among dyads using childcare, grandparental childcare is used (along with other types of childcare); and
3. Whether, among dyads using childcare, grandparental childcare is used as the *only* form of childcare.

The key explanatory variable is *ethnicity* which, in its derived form, includes the following categories: White British (reference); Other White; Indian; Pakistani; Bangladeshi; Caribbean; African; Other. An additional category of “Missing” was included, accounting for cases where no information about ethnicity is available, but for which we know whether (grandparental) childcare was used. A number of control variables is included in the analyses, following previous evidence (in particular, Arpino and Bordone 2014; Bordone *et al.* 2017; Hank and Buber 2009). At the parents’ level, the following controls were included, as they have been shown to be influential in past research in this area: *educatio*n (=1 if A level, higher, or degree; =0 otherwise) (Arpino and Bordone 2014; Burton *et al.* 2008); *household income* (three dummies consider the income tertiles) (Berthoud 1998); and *living arrangements*, distinguishing between living alone and living with a partner (Evandrou 2000). Taking into account the literature emphasising the importance of the mother’s economic activity status in the choices regarding childcare (Aassve *et al.* 2012; Arpino *et al.* 2014; Bordone *et al.* 2017), the analysis also accounted for whether the mother of the child is *working* (=1 if employed or self-employed; =0 otherwise). Previous research has shown that the demand for childcare is directly affected by the child’s age and whether they have siblings (Bordone *et al.* 2017), and as such, the analysis controls for the child’s *age* (continuous variable) and the *number of siblings* (none (reference); one; two or more).

When focusing specifically on the use of grandparental childcare, an indicator of the *geographical proximity* of the adult in the dyad to the parents/parents-in-law (*i.e.*, the grandparents of the child in the dyad) has been taken into account, which has been shown to be critical in existing work (*e.g.*, Hank and Buber 2009). This indicator distinguishes between having at least one parent/parent-in-law in the household; living within half an hour from the nearest parent/parent-in-law (reference); having the nearest parent/parent-in-law living between 30 minutes and 1 hour away; between 1 and 2 hours away; or more than two hours away. Information on the geographical distance to the parent(s)/parent(s)-in-law is only available in waves 1, 3, and 5, where the “family networks” module is included in the survey. In order not to lose observations, where possible, we used the information at the previous wave for the waves with missing values. Additionally, we created the category of “no grandparents/missing” where there is no information about the geographical distance either because no grandparent is alive for that child or because information concerning the proximity is missing. Additional analyses excluding waves 2 and 4, where proximity information was not available, provided very similar results on the variables of interest, and therefore, we decided to proceed with the analysis on the largest possible sample (results available on request from the corresponding author).

A number of variables were also included in preliminary analysis, but did not improve the models and were excluded from the final analysis. The results are shown as robustness checks. Firstly, the *migration background* of the respondent was considered (Table 4), describing them as belonging to a *second generation* if they were born in the UK, but their parents were not; as a *short-term migrant* if they were not born in the UK and moved to the UK since less than 14 years; as a *long-term migrant* if they were not born in the UK and moved to the UK at least 14 years earlier than the interview; and as *native* (reference category) if both the respondent and their parents were born in the UK. The threshold of 14 years was chosen as it corresponds to the median number of years that migrants in the sample had spent in the UK (50th percentile). Secondly, the *ethnicity* of both partners (*i.e.*, the respondent and their partner) was considered by including a variable which has value 0 if living alone; 1 if living with a White British partner; 2 if the partner is not White British; 3 if no information is available about the partner’s ethnicity (Table 5). Thirdly, the analysis considered whether at least one parent has *longstanding illness or impairment* (1 if yes; 0 if not, Table 6). Finally, preliminary analyses also controlled for whether at least one grandchild´s sibling is cared for by grandparents, but this variable was shown to be highly correlated with grandparental childcare in the dyad and was subsequently excluded from the analysis.

**Results**

***Descriptive analyses***

About 37.5 per cent of parents in the sample use (any type of) childcare, ranging from about 42 per cent of White British and Caribbean respondents to 6 per cent among Bangladeshi respondents (Table 2a). Among respondents using childcare (Table 2b), 14.4 per cent use grandparental childcare and 8.1 per cent use *only* grandparental childcare for their children. While 41.5 per cent of White British respondents use grandparental childcare, less than eight per cent of African respondents do so.

(Table 2 about here)

Exploring ethnic differences in greater detail, the analysis shows that Indian, Pakistani, Bangladeshi, and African individuals are less likely to use childcare than White British individuals (*e.g.*, 25 per cent of Indian parents use any childcare compared to 41 per cent of White British parents). Among those from BME communities using (any type of) childcare, the likelihood of using grandparental childcare is also lower than among White British individuals (*e.g.*, 28 per cent among Bangladeshi parents compared to 42 per cent of White British parents). Caribbean persons are more likely to use childcare than persons from other ethnic groups, however once they use childcare, such care is less likely to be grandparental childcare than for most of the other ethnic groups (with the exception of Africans). Individuals of Other White origin do not differ much from White British individuals in their probability to use childcare (37 vs. 41 per cent), nevertheless among those who use childcare, grandparental childcare is less likely to be used among Other White persons than among White British persons (23 vs. 42 per cent).

The reasons behind these differences may be complex, including demographic and socio-economic factors which may affect the availability of grandparents to provide care in different ethnic groups, and the demand for such care in the first place. For example, Table 2a shows that although there are no evident differences in the mean age of the children across the different ethnic groups samples, nevertheless 28 per cent of White British children have no siblings, compared to 13 per cent of Pakistani and 15 per cent of Bangladeshi children, indicating different family sizes between the ethnic groups. Large differences also permeate the living arrangements of the parent in the dyad which can directly affect the supply of childcare at home, with more than 90 per cent of respondents from the three South Asian groups living with a partner, compared to just over 40 per cent of Caribbean and 56 per cent of African respondents. In terms of socio-economic characteristics, 64 per cent of the children in the White British sub-group compared to 17 per cent of their Bangladeshi counterparts have a working mother, while about 45 per cent of Pakistani, Bangladeshi and Caribbean parent-child dyads live in low-income households compared to about one-third of White British parent-child dyads.

Focusing on dyads using childcare (Table 2b), it can be seen that respondents in such a sub-sample are generally more likely to be living with a partner, with the exception of those from a Pakistani, Bangladeshi and Other ethnic origin. Similarly, the proportion of working mothers is higher across all groups, albeit with persistent ethnic differentials (*e.g.*, more than 80 per cent of White British and Indian mothers are working, compared to 52 per cent of Pakistani and 63 per cent of Bangladeshi mothers), while the proportion of low-income households is lower across all groups except the Pakistani group. Importantly, while 72 per cent of White British parent-child dyads have at least one (grand)parent or (grand)parent-in-law living within 30 minutes, this is the case for only 14 per cent of African respondents. In order to assess the relative importance of a range of characteristics associated with the respondent’s use of childcare and grandparental childcare specifically, the next part of the paper presents results from multivariate analyses.

***Multivariate analyses***

The associations found between ethnic groups and the use of childcare in the descriptive analysis are confirmed by the logistic models, as shown in Table 3. Interestingly, the negative effect on grandparental childcare of belonging to an ethnic group different from the White British remains after controlling for geographical proximity to grandparents. In particular, the findings confirm that Indian, Pakistani, Bangladeshi, and African individuals are significantly less likely to use childcare than White British individuals (*e.g.*, the odds of using childcare among Bangladeshi parents are about 0.2 times the odds among White British parents, p<0.001) (Column a). However, once individuals from such groups use childcare, their likelihood of using grandparental childcare alongside other types of childcare is statistically significantly different from that of White British individuals for African, Caribbean and Indian dyads (Column b). Also in line with the descriptive analysis, Column c) shows that, once using childcare, Caribbean parents are less likely to use *only* grandparental childcare than White British parents (OR 0.394, p<0.001).

(Table 3 about here)

The control variables suggest the expected associations with the probability of using childcare and specifically grandparental childcare. For example, living with one’s partner reduces the likelihood of using any childcare compared to living alone (OR 0.907, p<0.01), although it is not statistically associated with the use of grandparental childcare. The higher the child’s age, the less likely it is that parents will use any childcare, however among those using childcare, there is a positive association between child’s age and the use of grandparental childcare. Children with siblings are significantly more likely to use (any) childcare compared to single children, however the higher the number of siblings the lower the chance of using grandparental childcare (along with other types of childcare or on its own). Critically, the likelihood of using grandparental childcare (either in combination with other types of childcare or on its own) decreases the further away the grandparent lives from the grandchild (*e.g.*, the dyads living between 30 mins-1 hour or between 1-2 hours away from the nearest grandparent are 68 and 78 per cent less likely respectively to use grandparental childcare along with other types of childcare, compared to those living within 30 minutes from a grandparent, p<0.001).

Two socio-economic factors deserve particular attention. Firstly, the fact that the mother is working is associated with a much higher likelihood of using childcare as well as grandparental childcare, either as an additional form of childcare or as the only one. For instance, in cases where the household includes a working mother, the odds of using grandparental childcare alongside other types of childcare are 1.31 times the odds among households without a working mother (p<0.001). Secondly, the effect of the parent’s education presents an intricate picture. Higher education is associated with a higher likelihood to use childcare per se, but is significantly negatively associated with the child being cared for by their grandparents, especially if this is the only form of childcare used. Such findings indicate a complex effect of the parents’ education, which may be mediated by greater employment opportunities for highly educated individuals, and a greater ability to dedicate financial resources to paid childcare.

***Robustness checks***

Results from the robustness checks where we controlled for migration background of the respondent, show that, on average, first generation migrants are less likely to use childcare than native British respondents; while we found no difference in the likelihood to use (any) childcare between second generation migrants and native British respondents. Among dyads using childcare, native British respondents are significantly more likely to use only grandparental childcare than dyads with a migration background (Table 4). We also found that, for migrants, there is an effect of the time spent in the UK: the more time they have spent in the country, the lower the difference with native. This variable was also interacted with the ethnicity variable in order to understand their combined effect, but due to the small sample size in some sub-groups, several categories were dropped from the model (results not shown).

(Table 4 about here)

Other than one’s own ethnicity, the ethnic group of one’s partner may also be associated with the choice of childcare. Indeed, when distinguishing between living with a White British partner and living with a partner from any other ethnicity, only the odds of the latter are negative and statistically significantly different from those among respondents living alone (Table 5). Although it would be potentially interesting to carry out models that account for the different ethnic combinations of couples in our sample, most of the respondents who are living with a partner, do belong to the same ethnic group as the partner (*e.g.*, about 77 per cent of White British women are married to or live with a White British men; among Indian women with a partner, almost 76 per cent have an Indian one, 78 per cent of Pakistani women have a Pakistani partner, 81 per cent of Bangladeshi women have a partner of the same ethnic group and this holds true for almost 71 per cent of African women). Only among women of Caribbean ethnicity, the proportion having a partner of the same ethnic group is below 50 per cent. It is also interesting to note that the effect of our explanatory variable remains very similar to that reported in Table 3 once a control for partner’s ethnicity is added.

(Table 5 about here)

Similarly, the results in Table 6 do not substantially differ from those of Table 3, despite including a control for longstanding illness or impairment of at least one of the parents. The odds for this variable are not statistically significant in any of the three models.

(Table 6 about here)

The final robustness checks consisted in carrying out the same analyses as in Table 3 by considering parent-child dyads only at first interview. Although the sample was significantly reduced, the results were qualitatively very similar to those presented in the main analyses (results available on request from the corresponding author).

**Discussion and conclusion**

The support between generations within the family is central in current academic as well as public debates, at a time when suggested solutions for overcoming the lack of, or the existence of expensive childcare, and slowing down the increase in long-term care expenditure all encourage the development of informal care provided by the family. However, most of the literature on intergenerational relationships has focused on the majority groups across Europe in terms of individuals’ ethnic background, or has not examined the population according to their migration history (exceptions are for example Bordone and de Valk 2016 on intergenerational support and de Valk and Bordone 2018 on intergenerational co-residence). By investigating the similarities and differences in the use of (grandparental) childcare across ethnic groups, this paper provides a more nuanced understanding of intergenerational support and contributes to shedding light on the increasing diversity of the European population.

The paper draws on previous evidence on grandparental childcare to investigate the role played by individuals’ ethnic origin in using any type of childcare and, among those who use childcare, their use of grandparental childcare. We used data from Understanding Society on parent-child dyads where parents are aged 18-60 years old, were interviewed at least once over five waves, and are responsible for at least one child below 15 years old. The findings provide comparative evidence of the use of grandparental childcare across five ethnic groups as compared to White British and Other White respondents in the UK. The results indicate significant ethnic differentials in the use of childcare provided by grandparents, with all other ethnic groups reporting lower likelihood to use grandparental childcare than White British individuals, after controlling for socio-economic and demographic variables.

This may at least in part be explained by ethnic differentials in areas adjacent to childcare, such as economic activity patterns among working-age individuals (middle generation) which may affect the demand for the grandparents’ help with childcare. For example, working-age women from Indian, Pakistani and Bangladeshi communities are significantly less likely to be in paid work compared to White British women, which can directly affect the former groups’ availability to care for their own children. In addition, the historical characteristics of migration among different ethnic groups may also contribute to the differentials shown in the paper, for example individuals from Caribbean communities continue to be more likely than other BME groups, to work in the public sector, which may partly explain their greater likelihood of using childcare. We partly controlled for this by including an indicator of the mother´s economic activity status, however future studies could extend this by investigating the role of the type of job (*e.g.*, part-time/full-time; self-employed/employee; private/public sector) of both parents. Furthermore, there might be differences in the health status of the grandparents across ethnic groups.

Unfortunately, Understanding Society does not provide information on the health status of all grandparents alive for each child and we acknowledge this as a limitation of our study. Indeed, an average poorer health status of grandparents in some BME as compared to others might be behind the lower use of grandparental childcare among parents in those ethnic groups. According to Evandrou *et al.* (2016), BME elders of South Asian origin show a “health disadvantage”, highlighting the complexity of inequalities among different ethnic groups in the UK. A further limitation relates to the limited sample size of the five BME and Other White groups which did not allow us to consider interaction effects, for example between ethnic origin and migration background. We should also note that differences between the five BME groups are difficult to interpret due to the different sample sizes and composition. Notwithstanding the difficulty of identifying differences between ethnic groups, we observe an important BME effect in comparison to the White British population which could point to inequalities beyond health inequalities, for example in terms of their access to social services or to market services. These aspects should be further investigated in future research and suggest the need to collect more data that are representative of subgroup populations. In addition, the multivariate models used reflect the conceptual framework shown in Figure 1. However, we acknowledge that some of the associations hypothesised in the framework and found in the results may hide a two-way causal direction. For example, proximity to the grandparents may incentivise grandparental childcare, but also grandparental childcare may be the reason for geographical proximity.

Yet, BME groups in this study show clear differences in the use of (grandparental) childcare and, in this respect, our results point at the role of cultural norms on raising children and childcare that seem to permeate family life in different ethnic cultures (*e.g.*, Bordone and de Valk 2016; Kagitçibasi 2005). Future studies accounting for norms in the analyses could clarify the extent of parents´ orientation towards the collective or individual and indicate the willingness of grandparents to provide support to their children in the form of childcare. As changes over time at society level (*e.g.*, in terms of policies, services, and the job market) might shape changes in childcare use across ethnic groups differently, future analyses expanding this work might also consider exploring the longitudinal dimension of macro-micro interactions.

The findings in this paper have therefore also critical policy implications, not least as a result of the socio-economic differentials existing between members of different BME communities in conjunction with the cost of childcare from the formal private sector in the UK. One-parent families, which are more common among African and Caribbean communities, are more likely to require formal support in terms of childcare, however they are also less likely to be able to afford such support unless it is subsidised. On the other hand, two-parent families may also face financial challenges in accessing formal childcare if only one parent is in paid work, and this is more likely to happen in Pakistani and Bangladeshi families, while higher educational qualifications do not necessarily lead to better employment opportunities and the ability to afford private childcare. Such findings paint a complex picture in terms of the role of social policy, which is more relevant in enhancing opportunities for accessing childcare, through a combination of employment opportunities and subsidised costs for childcare, than in regulating complex family relationships affecting grandparental childcare provision, which are permeated by cultural norms and practices.

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**Tables**

Table 1. Descriptive statistics (%) on the use of different types of childcare, by ethnicity.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | White British | Other White | Indian | Pakistani | Bangladeshi | Caribbean | African | Other | Missing |
| Grandparental childcare | 41.5 | 23.1 | 27.0 | 28.1 | 23.6 | 18.46 | 7.7 | 24.7 | 46.6 |
| Nursery school/class | 10.6 | 13.5 | 12.5 | 11.3 | 9.7 | 9.0 | 13.6 | 14.6 | 11.8 |
| Special day school | 0.5 | 0.7 | 0.3 | 0.5 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 |
| Day nursery/crèche | 6.8 | 10.3 | 7.6 | 6.2 | 7.6 | 3.7 | 5.3 | 7.0 | 11.4 |
| Playground/pre-school | 3.8 | 4.6 | 1.9 | 4.4 | 4.9 | 2.0 | 2.1 | 2.8 | 3.8 |
| Childminder | 10.7 | 7.9 | 6.9 | 5.8 | 0.7 | 13.0 | 17.6 | 9.2 | 11.6 |
| Nanny/au pair | 1.8 | 6.1 | 3.0 | 0 | 2.8 | 1.8 | 2.8 | 8.4 | 1.2 |
| Baby-sitter at home | 2.4 | 7.1 | 0.7 | 1.8 | 0 | 2.2 | 3.4 | 1.7 | 2.1 |
| Breakfast club on school site | 11.4 | 7.7 | 10.8 | 4.4 | 6.3 | 19.6 | 13.0 | 12.0 | 9.4 |
| Breakfast club not on school site | 4.4 | 4.5 | 5.9 | 3.7 | 4.2 | 9.3 | 8.8 | 6.5 | 3.7 |
| Holiday club | 1.1 | 1.0 | 1.4 | 0 | 0 | 2.9 | 1.9 | 1.6 | 0.7 |
| Ex partner | 3.7 | 1.6 | 0.5 | 1.8 | 2.8 | 4.6 | 2.5 | 4.4 | 2.8 |
| Older siblings | 2.3 | 5.3 | 0.8 | 0.9 | 3.5 | 5.1 | 1.8 | 1.0 | 1.8 |
| Other relative | 6.2 | 3.5 | 6.4 | 17.2 | 19.4 | 8.4 | 11.9 | 4.4 | 7.6 |
| Friend/neighbour | 5.9 | 9.4 | 7.4 | 5.3 | 4.9 | 6.6 | 13.0 | 7.1 | 6.0 |
| Other nursery | 0.2 | 0.3 | 0 | 0.5 | 0 | 1.8 | 1.0 | 0.3 | 0.1 |
| Other childcare provider | 0.5 | 0.3 | 0.7 | 3.0 | 2.8 | 1.3 | 1.0 | 0.8 | 0.5 |
| N | 14,636 | 998 | 593 | 435 | 144 | 547 | 831 | 1,149 | 5,822 |

*Source*: Authors’ analysis of USOC waves 1-5.

Table 2. Descriptive statistics (%) of the dependent and independent variables included in the analyses, by ethnicity: a) on the whole sample; b) considering only the sub-sample using childcare.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a) | White British | Other White | Indian | Pakistani | Bangladeshi | Caribbean | African | Other | Missing |
| Use childcare | 41.4 | 37.2 | 25.4 | 12.9 | 6.4 | 42.2 | 30.1 | 32.5 | 43.6 |
| Working mother | 63.7 | 59.9 | 60.9 | 19.2 | 17.3 | 58.8 | 46.3 | 48.8 | 66.6 |
| Living with partner | 61.7 | 73.1 | 90.2 | 91.4 | 90.7 | 40.4 | 55.5 | 66.6 | 82.8 |
| High education | 21.0 | 17.1 | 6.6 | 6.8 | 3.1 | 38.6 | 28.4 | 21.0 | 19.0 |
| Child age (mean) | 7.7 | 7.0 | 7.4 | 7.4 | 7.6 | 8.1 | 7.2 | 7.0 | 6.5 |
| No siblings | 28.0 | 25.3 | 23.4 | 13.1 | 14.9 | 34.7 | 17.2 | 28.89 | 36.0 |
| 1 | 45.6 | 47.9 | 51.1 | 34.2 | 32.9 | 41.5 | 34.62 | 46.1 | 40.7 |
| 2+ | 26.4 | 26.8 | 25.6 | 52.8 | 52.2 | 23.8 | 48.2 | 25.1 | 23.3 |
| Income: low | 31.6 | 39.4 | 27.4 | 45.4 | 44.7 | 46.1 | 46.9 | 40.4 | 28.4 |
| Medium | 33.6 | 32.2 | 36.6 | 36.4 | 36.7 | 29.8 | 31.5 | 30.6 | 32.7 |
| High | 34.9 | 38.4 | 36.1 | 18.2 | 18.6 | 24.1 | 21.6 | 29.0 | 38.9 |
| N | 36,345 | 2,725 | 2,394 | 3,526 | 2,344 | 1,351 | 2,877 | 3,655 | 13,671 |
| % | 52.8 | 4.0 | 3.5 | 5.1 | 3.4 | 2.0 | 4.2 | 5.3 | 19.9 |
|  |  | | | | | | | | |
| b) | Among those using childcare | | | | | | | | |
| Also grandparental childcare | 41.5 | 23.1 | 27.0 | 28.1 | 23.6 | 18.5 | 7.7 | 24.7 | 46.6 |
| Only grandparental childcare | 23.5 | 14.5 | 19.7 | 18.2 | 13.2 | 8.8 | 4.6 | 15.8 | 25.3 |
| Working mother | 81.2 | 77.5 | 85.3 | 51.7 | 63.2 | 75.1 | 72.0 | 75.5 | 86.2 |
| Living with partner | 65.9 | 78.3 | 90.6 | 81.8 | 86.8 | 41.7 | 57.0 | 64.6 | 86.1 |
| High education | 25.4 | 16.6 | 9.6 | 18.6 | 12.5 | 40.4 | 38.0 | 30.7 | 22.5 |
| Child age (mean) | 6.2 | 5.7 | 6.1 | 5.9 | 5.9 | 7.1 | 6.0 | 5.8 | 5.2 |
| No siblings | 22.9 | 22.4 | 20.9 | 12.2 | 25.0 | 31.18 | 17.8 | 27.5 | 33.3 |
| 1 | 54.0 | 56.3 | 58.4 | 49.2 | 33.3 | 45.7 | 43.9 | 51.9 | 48.0 |
| 2+ | 23.1 | 21.4 | 20.7 | 38.6 | 41.7 | 23.2 | 38.3 | 20.6 | 18.7 |
| Income: low | 23.4 | 15.6 | 15.0 | 45.5 | 31.9 | 40.6 | 37.8 | 27.7 | 20.0 |
| medium | 32.3 | 34.7 | 28.2 | 31.0 | 36.1 | 33.5 | 30.7 | 31.8 | 31.4 |
| high | 44.4 | 49.7 | 56.8 | 23.5 | 31.9 | 26.0 | 31.5 | 40.6 | 48.6 |
| Proximity to grandparents <30’ | 72.0 | 41.8 | 46.5 | 62.1 | 33.3 | 49.4 | 14.2 | 36.6 | 53.1 |
| 30’-1h | 8.4 | 3.4 | 7.9 | 7.1 | 6.9 | 14.4 | 4.5 | 8.7 | 5.3 |
| 1-2h | 6.54 | 6.1 | 6.2 | 6.0 | 19.4 | 5.5 | 4.2 | 7.1 | 5.3 |
| >2h | 9.4 | 44.6 | 34.4 | 18.4 | 32.6 | 26.1 | 65.5 | 42.48 | 7.9 |
| No grandparents/missing information | 3.7 | 4.1 | 4.9 | 6.4 | 7.6 | 4.6 | 11.7 | 5.2 | 28.5 |
| N | 14,636 | 988 | 593 | 435 | 144 | 547 | 831 | 1,149 | 5,822 |
| % | 58.2 | 3.9 | 2.4 | 1.7 | 0.6 | 2.2 | 3.3 | 4.6 | 23.2 |

*Source*: Authors’ analysis of USOC waves 1-5.

Table 3. Odds ratios (clustered Standard Errors in parenthesis) of the logistic analyses on a) using childcare; b) among those using childcare, using grandparental childcare; c) among those using childcare, only using grandparental childcare.

|  |  |  |  |
| --- | --- | --- | --- |
|  | a) Childcare use | b) Grandparental childcare | c) Only grandparental childcare |
| Ethnicity: Other White (ref: White British) | 0.780\*\*\* | 0.711\*\* | 0.856 |
|  | (0.054) | (0.083) | (0.116) |
| Indian | 0.439\*\*\* | 0.774+ | 1.116 |
|  | (0.034) | (0.105) | (0.168) |
| Pakistani | 0.402\*\*\* | 0.768 | 0.907 |
|  | (0.037) | (0.138) | (0.187) |
| Bangladeshi | 0.192\*\*\* | 0.899 | 0.888 |
|  | (0.026) | (0.283) | (0.338) |
| Caribbean | 1.207\* | 0.391\*\*\* | 0.394\*\*\* |
|  | (0.110) | (0.057) | (0.080) |
| African | 0.721\*\*\* | 0.338\*\*\* | 0.409\*\*\* |
|  | (0.053) | (0.063) | (0.098) |
| Other | 0.750\*\*\* | 0.820+ | 1.085 |
|  | (0.044) | (0.085) | (0.127) |
| Missing | 0.904\*\* | 1.297\*\*\* | 1.191\*\* |
|  | (0.031) | (0.064) | (0.066) |
| Working mother (ref: not) | 4.923\*\*\* | 1.316\*\*\* | 1.354\*\*\* |
|  | (0.162) | (0.071) | (0.086) |
| With partner (ref: living alone) | 0.907\*\* | 0.931 | 0.967 |
|  | (0.033) | (0.050) | (0.060) |
| High education (ref: low) | 1.717\*\*\* | 0.911+ | 0.699\*\*\* |
|  | (0.064) | (0.046) | (0.041) |
| HH income (ref: 1st tertile, low) |  |  |  |
| 2nd tertile, middle | 1.198\*\*\* | 1.116\* | 1.099 |
|  | (0.043) | (0.060) | (0.066) |
| 3rd tertile, high | 1.938\*\*\* | 1.065 | 0.904 |
|  | (0.072) | (0.058) | (0.056) |
| Child age | 0.872\*\*\* | 1.012\*\* | 1.055\*\*\* |
|  | (0.002) | (0.004) | (0.005) |
| 1 sibling (ref: 0) | 1.663\*\*\* | 0.743\*\*\* | 1.020 |
|  | (0.044) | (0.029) | (0.044) |
| 2+ siblings | 1.235\*\*\* | 0.465\*\*\* | 0.802\*\*\* |
|  | (0.047) | (0.027) | (0.053) |
| Proximity to grandparents: 30’-1h (ref: <30’) |  | 0.326\*\*\* | 0.301\*\*\* |
|  |  | (0.024) | (0.032) |
| 1-2h |  | 0.225\*\*\* | 0.185\*\*\* |
|  |  | (0.021) | (0.026) |
| >2h |  | 0.116\*\*\* | 0.156\*\*\* |
|  |  | (0.009) | (0.016) |
| No grandparents/missing |  | 0.480\*\*\* | 0.617\*\*\* |
|  |  | (0.033) | (0.049) |
| N | 68,888 | 25,145 | 25,145 |

*Note*: all models also include an indicator for the wave of interview; significance levels: + p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001. *Source*: Authors’ analysis of USOC waves 1-5

Table 4. Odds ratios (clustered Standard Errors in parenthesis) of the logistic analyses on a) using childcare; b) among those using childcare, using grandparental childcare; c) among those using childcare, only using grandparental childcare, controlling for migration background.

|  |  |  |  |
| --- | --- | --- | --- |
|  | a) Childcare use | b) Grandparental childcare | c) Only grandparental childcare |
| Ethnicity: Other White (ref: White British) | 1.097 | 0.847 | 1.105 |
|  | (0.125) | (0.143) | (0.211) |
| Indian | 0.604\*\*\* | 0.924 | 1.522\* |
|  | (0.075) | (0.177) | (0.321) |
| Pakistani | 0.542\*\*\* | 0.910 | 1.251 |
|  | (0.071) | (0.197) | (0.312) |
| Bangladeshi | 0.268\*\*\* | 1.085 | 1.194 |
|  | (0.045) | (0.370) | (0.488) |
| Caribbean | 1.468\*\* | 0.454\*\*\* | 0.540\*\* |
|  | (0.179) | (0.082) | (0.126) |
| African | 1.044 | 0.418\*\*\* | 0.516\* |
|  | (0.124) | (0.094) | (0.147) |
| Other | 0.987 | 0.958 | 1.427\* |
|  | (0.102) | (0.142) | (0.225) |
| Missing | 1.266\* | 1.554\*\* | 1.618\*\* |
|  | (0.136) | (0.241) | (0.280) |
| Native (ref: Second generation) | 0.971 | 1.138 | 1.498\*\* |
|  | (0.092) | (0.145) | (0.207) |
| Migrant in the country ≤14 | 0.548\*\*\* | 0.837 | 1.361 |
|  | (0.064) | (0.202) | (0.389) |
| Migrant in the country >14 | 0.712\*\* | 0.872 | 1.258 |
|  | (0.080) | (0.162) | (0.283) |
| Missing | 0.689\*\*\* | 0.945 | 1.094 |
|  | (0.062) | (0.135) | (0.189) |
| Working mother (ref: not) | 4.919\*\*\* | 1.315\*\*\* | 1.357\*\*\* |
|  | (0.162) | (0.071) | (0.086) |
| With partner (ref: living alone) | 0.917\* | 0.927 | 0.962 |
|  | (0.034) | (0.051) | (0.061) |
| High education (ref: low) | 1.703\*\*\* | 0.915+ | 0.704\*\*\* |
|  | (0.064) | (0.047) | (0.042) |
| HH income (ref: 1st tertile, low) |  |  |  |
| 2nd tertile, middle | 1.196\*\*\* | 1.115\* | 1.099 |
|  | (0.043) | (0.060) | (0.066) |
| 3rd tertile, high | 1.937\*\*\* | 1.064 | 0.905 |
|  | (0.072) | (0.058) | (0.057) |
| Child age | 0.872\*\*\* | 1.012\*\* | 1.055\*\*\* |
|  | (0.002) | (0.004) | (0.005) |
| 1 sibling (ref: 0) | 1.663\*\*\* | 0.743\*\*\* | 1.019 |
|  | (0.044) | (0.029) | (0.044) |
| 2+ siblings | 1.232\*\*\* | 0.465\*\*\* | 0.801\*\*\* |
|  | (0.047) | (0.027) | (0.053) |
| Proximity to grandparents: 30’-1h (ref: <30’) |  | 0.327\*\*\* | 0.302\*\*\* |
|  |  | (0.024) | (0.032) |
| 1-2h |  | 0.225\*\*\* | 0.186\*\*\* |
|  |  | (0.021) | (0.026) |
| >2h |  | 0.118\*\*\* | 0.156\*\*\* |
|  |  | (0.009) | (0.016) |
| No grandparents/missing |  | 0.483\*\*\* | 0.617\*\*\* |
|  |  | (0.033) | (0.049) |
| N | 68,888 | 25,145 | 25,145 |

*Note*: all models also include an indicator for the wave of interview; significance levels: + p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001. *Source*: Authors’ analysis of USOC waves 1-5

Table 5. Odds ratios (clustered Standard Errors in parenthesis) of the logistic analyses on a) using childcare; b) among those using childcare, using grandparental childcare; c) among those using childcare, only using grandparental childcare, accounting for partner’s ethnicity.

|  |  |  |  |
| --- | --- | --- | --- |
|  | a) Childcare use | b) Grandparental childcare | c) Only grandparental childcare |
| Ethnicity: Other White (ref: White British) | 0.844\* | 0.792\* | 0.953 |
|  | (0.060) | (0.093) | (0.131) |
| Indian | 0.519\*\*\* | 0.983 | 1.428\* |
|  | (0.043) | (0.143) | (0.231) |
| Pakistani | 0.470\*\*\* | 0.934 | 1.094 |
|  | (0.046) | (0.174) | (0.233) |
| Bangladeshi | 0.227\*\*\* | 1.140 | 1.133 |
|  | (0.032) | (0.358) | (0.432) |
| Caribbean | 1.295\*\* | 0.428\*\*\* | 0.429\*\*\* |
|  | (0.120) | (0.063) | (0.088) |
| African | 0.800\*\* | 0.372\*\*\* | 0.451\*\*\* |
|  | (0.060) | (0.071) | (0.109) |
| Other | 0.823\*\* | 0.912 | 1.207 |
|  | (0.050) | (0.098) | (0.144) |
| Working mother (ref: not) | 4.915\*\*\* | 1.317\*\*\* | 1.359\*\*\* |
|  | (0.162) | (0.071) | (0.086) |
| With White British partner (ref: living alone) | 0.990 | 0.957 | 0.957 |
|  | (0.042) | (0.060) | (0.068) |
| With Other Ethnic group partner | 0.738\*\*\* | 0.626\*\*\* | 0.636\*\*\* |
|  | (0.045) | (0.068) | (0.080) |
| With partner, ethnicity not known | 0.883\*\* | 0.964 | 1.038 |
|  | (0.036) | (0.058) | (0.072) |
| High education (ref: low) | 1.722\*\*\* | 0.900\* | 0.686\*\*\* |
|  | (0.064) | (0.046) | (0.041) |
| HH income (ref: 1st tertile, low) |  |  |  |
| 2nd tertile, middle | 1.198\*\*\* | 1.116\* | 1.100 |
|  | (0.043) | (0.060) | (0.066) |
| 3rd tertile, high | 1.928\*\*\* | 1.061 | 0.903 |
|  | (0.071) | (0.058) | (0.057) |
| Child age | 0.872\*\*\* | 1.012\*\* | 1.055\*\*\* |
|  | (0.002) | (0.004) | (0.005) |
| 1 sibling (ref: 0) | 1.668\*\*\* | 0.745\*\*\* | 1.022 |
|  | (0.044) | (0.029) | (0.045) |
| 2+ siblings | 1.241\*\*\* | 0.470\*\*\* | 0.809\*\* |
|  | (0.048) | (0.028) | (0.054) |
| Proximity to grandparents: 30’-1h (ref: <30’) |  | 0.329\*\*\* | 0.301\*\*\* |
|  |  | (0.025) | (0.032) |
| 1-2h |  | 0.224\*\*\* | 0.183\*\*\* |
|  |  | (0.021) | (0.025) |
| >2h |  | 0.117\*\*\* | 0.157\*\*\* |
|  |  | (0.009) | (0.016) |
| No grandparents/missing |  | 0.478\*\*\* | 0.608\*\*\* |
|  |  | (0.033) | (0.048) |
| N | 68,888 | 25,145 | 25,145 |

*Note*: all models also include an indicator for the wave of interview; significance levels: + p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001. *Source*: Authors’ analysis of USOC waves 1-5

Table 6. Odds ratios (clustered Standard Errors in parenthesis) of the logistic analyses on a) using childcare; b) among those using childcare, using grandparental childcare; c) among those using childcare, only using grandparental childcare, accounting for whether at least one parent has longstanding illness or impairment.

|  |  |  |  |
| --- | --- | --- | --- |
|  | a) Childcare use | b) Grandparental childcare | c) Only grandparental childcare |
| Ethnicity: Other White (ref: White British) | 0.731\*\*\* | 0.732\*\* | 0.892 |
|  | (0.052) | (0.089) | (0.126) |
| Indian | 0.464\*\*\* | 0.745\* | 1.080 |
|  | (0.038) | (0.104) | (0.169) |
| Pakistani | 0.404\*\*\* | 0.750 | 0.975 |
|  | (0.040) | (0.145) | (0.215) |
| Bangladeshi | 0.182\*\*\* | 0.895 | 0.853 |
|  | (0.027) | (0.283) | (0.328) |
| Caribbean | 1.198+ | 0.406\*\*\* | 0.394\*\*\* |
|  | (0.114) | (0.061) | (0.083) |
| African | 0.730\*\*\* | 0.339\*\*\* | 0.417\*\*\* |
|  | (0.056) | (0.066) | (0.102) |
| Other | 0.759\*\*\* | 0.812+ | 1.097 |
|  | (0.046) | (0.088) | (0.134) |
| Missing | 0.917\* | 1.289\*\*\* | 1.183\*\* |
|  | (0.032) | (0.066) | (0.068) |
| Working mother (ref: not) | 4.911\*\*\* | 1.330\*\*\* | 1.318\*\*\* |
|  | (0.168) | (0.074) | (0.086) |
| With partner (ref: living alone) | 0.892\*\* | 0.924 | 0.963 |
|  | (0.033) | (0.051) | (0.061) |
| High education (ref: low) | 1.718\*\*\* | 0.911+ | 0.700\*\*\* |
|  | (0.064) | (0.047) | (0.042) |
| HH income (ref: 1st tertile, low) |  |  |  |
| 2nd tertile, middle | 1.216\*\*\* | 1.124\* | 1.101 |
|  | (0.045) | (0.062) | (0.068) |
| 3rd tertile, high | 2.022\*\*\* | 1.066 | 0.897+ |
|  | (0.078) | (0.060) | (0.059) |
| Longstanding illness | 1.054 | 0.997 | 0.980 |
|  | (0.035) | (0.047) | (0.053) |
| Child age | 0.872\*\*\* | 1.012\*\* | 1.054\*\*\* |
|  | (0.002) | (0.004) | (0.005) |
| 1 sibling (ref: 0) | 1.640\*\*\* | 0.735\*\*\* | 1.022 |
|  | (0.045) | (0.029) | (0.046) |
| 2+ siblings | 1.232\*\*\* | 0.460\*\*\* | 0.809\*\* |
|  | (0.049) | (0.028) | (0.056) |
| Proximity to grandparents: 30’-1h (ref: <30’) |  | 0.308\*\*\* | 0.269\*\*\* |
|  |  | (0.024) | (0.030) |
| 1-2h |  | 0.221\*\*\* | 0.191\*\*\* |
|  |  | (0.022) | (0.028) |
| >2h |  | 0.112\*\*\* | 0.143\*\*\* |
|  |  | (0.009) | (0.016) |
| No grandparents/missing |  | 0.502\*\*\* | 0.654\*\*\* |
|  |  | (0.036) | (0.054) |
| N | 63,556 | 23,306 | 23,306 |

*Note*: all models also include an indicator for the wave of interview; significance levels: + p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001. *Source*: Authors’ analysis of USOC waves 1-5

**Figure 1. Conceptual framework**