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# Informal childcare arrangements: a comparison between Italians and migrants

Eleonora Trappolini<sup>1,3\*</sup> , Laura Terzera<sup>2</sup>, Stefania M. L. Rimoldi<sup>2</sup> and Elisa Barbiano di Belgiojoso<sup>2</sup>

\*Correspondence:  
eleonora.trappolini@uniroma1.it

<sup>1</sup> Sapienza University of Rome,  
Rome, Italy

<sup>2</sup> University of Milan-Bicocca,  
Milan, Italy

<sup>3</sup> Department of Methods  
and Models for Economics,  
Territory and Finance, Via  
del Castro Laurenziano, 9,  
00161 Rome, Italy

## Abstract

As migrants settle in their destination country, for those who reunited the family or after childbirth childcare becomes a priority. Most studies on migrants' childcare arrangements have focused on parental use of formal childcare rather than on different informal childcare solutions by analysing only families with preschool-age children. Italy poses an interesting case study because its welfare system is characterised by a familistic model of care, based on solidarity between generations. In familistic countries, migrants' childcare solutions are more constrained. In this study, we analysed differences in informal childcare needs and arrangements for children younger than 14 between Italians and migrants from different countries of origin. We merged two surveys conducted by the Italian National Statistics Institute in 2011–2012: 'Social Condition and Integration of Foreign Citizens', a sample of households with at least one migrant with foreign citizenship, and 'Multiscopo—Aspects of Daily Life', a sample of households in Italy. We found that household composition and parents' employment status play an important role in shaping informal childcare arrangements. Overall, migrants are less likely to use informal childcare, especially grandparents, than Italians but when they do, they rely more on other relatives and non-relatives than Italians. Moreover, differences emerge across migrant subgroups. This study is the first in Italy to contribute to an understanding of the role of migrant status in determining parents' childcare arrangements for children up to 13 years.

**Keywords:** Childcare, Migrants, Italians, Italy, Household

## Introduction

The question of how families make childcare arrangements is an important research topic because of its close association with women's participation in the labour market (Del Boca & Viuri, 2001), and possibly future fertility behaviour (Rindfuss et al., 2010). Most published studies in this field concern the overall population and typically consider migrants as childcare providers rather than potential consumers of such services (Williams & Gavanoas, 2016). However, as migrants settle in the destination country and reunite with their spouses and children or form new families, childcare becomes a priority to reconcile work and parenthood. To this end, notice that although migrant women have higher activity rates than Italian women, migrant mothers have much lower employment rates compared to Italian mothers (Istat, 2019). This may be especially true

for migrants who have left behind their closest kinship ties (Bojarczuk & Mühlau, 2018). The few available studies on migrants' childcare arrangements suggest that migrants more often utilise informal rather than formal care (Bonizzoni, 2014; Ryan, 2007; Seibel & Hedeegard 2017).

All parents face opportunities and constraints when choosing childcare (Early & Burchinal, 2001; Furfaro et al., 2020; Röder et al., 2018). Thus, childcare might be determined by compromise rather than choice (Miller et al., 2013). Indeed, parental preferences are primarily concerned with choosing whether or not to use childcare services and secondly with choosing between formal (mainly kindergarten) and informal childcare (grandparents, other family members or non-relatives, such as friends or neighbours).

The Italian case is interesting for several reasons. First, the Italian care regime has long been characterised by the male breadwinner model, with a traditional division of work and family responsibilities on gender lines (Mencarini & Solera, 2004), which generally considers childcare to be women's responsibility (Naldini & Saraceno, 2011). Second, Italy's welfare system is characterised by a familistic model of care based on solidarity between generations, resulting in a lack of measures and public services available to help reconcile working life and parenthood and integrate women into the labour market (Esping-Andersen, 1990, 2016; Santero & Naldini, 2020). Thus, in countries where grandparents and relatives play a relevant role in informal childcare, as in Italy (Di Gessa et al., 2016; Zamberletti et al., 2018), the migrant status further constrains parents' childcare arrangements. Being a migrant strengthens the maternal role among those who are more traditionalist (among whom female employment is not widespread) and forces households with working mothers to opt for different types of informal childcare.

The present study sheds light on how being a migrant may influence parents' informal childcare arrangements, by examining two Italian surveys conducted by the Italian National Statistics Institute (ISTAT) in 2011–2012: the multipurpose household sample survey 'Social Condition and Integration of Foreign Citizens', and the 'Multiscopo—Aspects of Daily Life', a sample of Italian households. In this study, we analysed informal childcare arrangements among migrants with foreign citizenship (hereafter, migrants) and Italians.<sup>1</sup> Our contribution to the literature is fourfold. First, while most studies on migrants' childcare arrangements limited their analyses to preschool-age children (0–5 years), we also included school-age children (6–13 years) because these children continue to require care after school hours, especially in countries such as Italy where the school system generally does not provide for full-time attendance. Second, we considered informal childcare—a topic with limited evidence at the national and international level—by distinguishing among multiple sources of informal childcare (grandparents, other relatives, and non-relatives). Third, we focused on where there was no reported need for childcare (which occurs when at least one parent is available to take care of the children, or the formal care is sufficient to reconcile family commitments)<sup>2</sup> by investigating the factors associated with this choice. Fourth, we chose households as the unit of analysis to study the effects of certain household characteristics (i.e., the availability of possible caregivers within the household and parents' employment status) on

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<sup>1</sup> For further details, see the [Data](#) section.

<sup>2</sup> For further details, see [Dependent variable](#) section.

families' childcare arrangements, without limiting the analysis to mothers' characteristics as in previous studies focusing on the relationship between grandparent childcare and mothers' participation in the labour market (Aassve et al., 2012; Arpino et al., 2014; Zamberletti et al., 2018).

### **Literature review**

Most studies on migrants' childcare arrangements have focused on whether migrants opt to enrol their children in preschool services. However, the literature on different types of informal childcare is limited. Therefore, we constructed a theoretical framework based on the available literature about choosing to enrol young children in preschool, attempting to extend its application to our specific issue.

### **Childcare in the Italian context: a framework for natives' and migrants' arrangements**

Available studies on migrants' childcare arrangements suggest that migrants use informal care more than they use formal care (Barglowski et al., 2015; Bonizzoni, 2014; Ryan, 2007; Seibel and Hedeegard 2017). These results call for an in-depth study of the Italian case.

Although families in Italy have recently become more similar to those in Northern Europe (De Rose & Vignoli, 2011), the country continues to be characterized by a familistic welfare model (Dalla Zuanna & Micheli, 2004; Esping-Andersen, 1990; Léon & Migliavacca, 2013) where responsibility for individual wellbeing falls largely on the family, and family policies (based on the three pillars: family allowances, parental leave, and care services) are scarce, not universal, and not generous (Costa & Sabatinelli, 2011; Presidency of the Council of Ministers, 2020). Women remain the predominant caregivers in the family (Mencarini & Solera, 2004; Saraceno & Keck, 2008). Such caring commitments are in conflict with women's professional lives and have long been associated with low participation in paid work, especially before the 1980s (Arpino et al., 2014), and low fertility since the 1980s.

Moreover, Italy's familistic model is characterised by the strongest intergenerational exchange among European countries (Di Gessa et al., 2016; Santero & Naldini, 2020; Zamberletti et al., 2018). In this context, the role of family members remains essential. Grandparents are common childcare providers in all Western countries, but Italian grandparents look after their grandchildren more frequently than their counterparts in other European countries. According to Arpino et al. (2010), 30% of Italian grandparents look after their grandchildren daily, compared with 15% in Germany and Austria and only 2% in Denmark and Sweden. The literature highlights how grandparental care differs with the age of grandchildren: grandparents' support is lower when children are aged 0–2 years old (possibly because mothers take care of their children), or 11 years old or over (in most cases because they can be left alone or with other relatives) (Di Gessa et al., 2016; Zamberletti et al., 2018).

Despite the high internal mobility of young people from Southern to Northern regions, Italy, alongside Spain and Greece, has the highest rate of co-residence between grandchildren and grandparents, and the highest residential proximity (Dalla Zuanna & Gargiulo, 2021; Hank, 2007; Isengard, 2013; Tomassini et al., 2004). Nearly 70% of Italians aged 50+ live with their adult children or within 5 km, with that percentage dropping to

35% in Sweden and 25% in Denmark (Isengard, 2013). This residential proximity facilitates grandparental childcare daily among Italians (Arpino et al., 2010; Tomassini et al., 2004). Provision of childcare by grandparents is advantageous because it is flexible and free of cost (Giraldo et al., 2011). However, some factors beyond parents' control can influence grandparental childcare: the availability of healthy grandparents (Trappolini et al., 2021); residential proximity between generations (Giraldo et al., 2011); and grandparents' willingness to provide childcare (Goodfellow & Lavery, 2003; Keck & Saraceno, 2008).

Meanwhile, Italy's immigrant population has been growing for several decades, transforming Italy into one of the main European destination countries (ISMU, 2015). The number of resident families with all foreign-born members has continued to increase as forerunners reunite with their family members or form new families (ISTAT, 2018; Strozza & De Santis, 2017). Therefore, childcare is a common issue for migrants in Italy, and the constraints placed on migrants' childcare arrangements by the prevailing familistic model may soon become evident.

The first constraint derives from the Italian law, similar to those found in most European countries, that establishes strict criteria for reuniting parents and relatives other than spouses and minor children. Adult children can be reunited only in the case of severe disability. Parents aged 65 or above can be reunited only if they have no other children or other relatives in their own country who can look after them due to serious health problems (Article 23 L 189/02). Moreover, the 2008 legislative decree n.160 added the request for private health insurance (or privately funded registration with the National Health System) as a requisite for reunifying people aged 65 or above (Bonizzoni, 2015). The infrequent reunification of parents or relatives and the low share of first-generation immigrants who are already grandparents means migrants have less robust family networks than natives in destination countries, and compared with in their countries of origin (Barbiano di Belgiojoso & Terzera, 2018). In addition, residential proximity between generations is lower among migrants (Giraldo et al., 2011). These facts create an important gap between migrants and natives in terms of childcare options.

The second constraint refers to migrants' socioeconomic conditions. In Italy, the scarcity of government support and public childcare services is not wholly offset by private services, due to the poor economic conditions of most migrants in the country (Ambrosini, 2015; Bonizzoni, 2009). Furthermore, poor information about the public childcare system and limited knowledge of the language, especially for newly arrived migrant families, can limit their perceptions of childcare options (Archambault et al., 2020; Seibel, 2021). Finally, since migrant women are more frequently employed in low-quality jobs compared to native women, their attachment to work is low (Bonizzoni, 2014; Mari-Klose & Moreno-Fuentes, 2013); therefore, when they become mothers, they are more inclined to take care of their children themselves. Indeed, although migrant women show a higher overall activity rate than Italian women (59.3% vs 56.1%), migrant mothers in the 25–49 age group have much lower employment rates compared to Italian mothers (43.6% vs 59.8%), and the gap is even higher for the inactivity rate (86.3% vs 50.7%) (Istat, 2019).

Based on this theoretical framework we formulate the following hypotheses:

Hypothesis 1 (H1): we expect different childcare needs and solutions between Italians and migrants:

H1a. Due to the lower availability of family networks, together with the poor supply of public childcare services, we expect migrants to be more likely to take care of their children by themselves. Therefore, we presume that no need for informal care is more frequent among migrants.

H1b. Italians are more likely to receive support from grandparents, while migrants are frequently without the presence of grandparents; thus, compared with Italians we expect migrants in the study sample to opt more frequently for other relatives (if available) or non-relatives and less frequently for grandparents.

Hypothesis 2 (H2): as family's childcare arrangements depend on household characteristics, we expect (for both migrants and Italians) that:

H2a. Households with children older than 14 and younger than 19 years (who can take care of younger siblings) to rely more on family childcare, especially in those families with school-age children.

H2b. Composite households to rely more on family childcare (grandparents and other relatives) than couples and single parent families.

H2c. Parents' employment status can shape childcare needs and solutions. Because they can look after their children at home, households with at least one inactive/unemployed parent are more likely to declare no need for informal childcare than households with both parents employed. We expect such a pattern to be stronger among migrant households.

### **Origin/ethnicity effect: differences in childcare arrangements between migrants and natives**

An important result revealed in the literature on migrants' childcare is the role of origin and ethnicity when choosing childcare arrangements. Studies on this subject using US data appear first in the literature. According to these studies, migrants use centre-based childcare less than natives, and ethnicity is more influential than poverty in this decision (Early & Burchinal, 2001; Lin & Wiley, 2017; Radey & Brewster, 2007). Indeed, some studies in the USA reported differences by ethnicities/races on the probability of reliance on family and non-family care. According to Kim and Fram (2009), Hispanic parents (rather than White-Caucasian) were more likely to choose relative care versus centre-based care. As stated by Radey and Brewster (2007), Hispanic children are most likely to be cared for by maternal kin, Black children in organized centres, and White children by their fathers. Differences emerge also with reference to migrant groups: Brandon (2004) found that children with Mexican, other Hispanic, and Asian backgrounds are less likely to use centre-based childcare compared with non-Hispanic white children, while non-Hispanic black children are more likely. Obeng (2007) found that although many African immigrants preferred family members to take care of their children in their own homes to instill African cultural identity in them, the majority of their children were in childcare centres.

In the European context, studies found that migrant parents opt for a range of informal solutions beyond the help of relatives to arrange childcare, with differences according to mothers' origins (Bojarczuk & Mühlau, 2018; Bonizzoni, 2014; Furfaro et al., 2020). A study of Polish migrants in London by Ryan et al. (2009) had similar findings to studies in the German context (Barglowski et al., 2015; Bilecen & Sienkiewicz, 2015), all finding

that kinship relations are important sources of childcare, especially grandmothers (Barglowski et al., 2015; Ryan, 2011a), younger siblings, and cousins (Ryan, 2011a, 2011b) even when children are not with their parents in the destination country, but rather with other family members in the country of origin. Therefore, childcare arrangements cannot be dichotomised between migrants and natives (Miller et al., 2013), because immigrants of different origins demonstrate different propensities and strategies (Seibel & Hedegaard, 2017), and these differences are as crucial as those among natives.

Literature is scarce on the impact of the cultural heritage that migrants bring from their country of origin on childcare arrangements in the country of arrival. In this regard, as suggested by other studies (Early & Burchinal, 2001; Lin & Wiley, 2017; Radey & Brewster, 2007), the country of origin can be considered a proxy for migrants' cultural values and beliefs, which can be maintained after migration (Milewski, 2007). Some evidence shows that, overall, when attachment to this heritage is strong, families prefer to keep children's care within the family, or within a network of relatives or their network of co-ethnics (Brandon, 2004; Liang et al., 2000; Lowe & Weisner, 2004; Mugazda et al., 2019; Wall & José, 2004). Moroccans in Italy, for example, prefer principally to delegate childcare to stay-at-home mothers; in the case of working mothers, the choice for care is grandparents, if available, and only finally resorting to other Moroccan non-working women (Wall & José, 2004). In a study of Sub-Saharan populations, Mugazda et al. (2019) showed that for those families a common strategy is to rely upon community, therefore, children's care is usually performed outside the family (often delegated to friends or neighbours). According to a study in the USA (Liang et al., 2000), Latino families prefer caregivers from their own family, but are willing to delegate the care externally, as long as it is to people with the same cultural background.

The chosen childcare pattern is an 'intricate interplay of social protections availability, gender norms, and social class, which together engender various childcare strategies' (Barglowski & Pustulka, 2018: p. 1). In other words, numerous factors and limitations contribute to childcare arrangements, and racial/ethnic differences in arrangements are reduced when these are controlled for (Radey & Brewster, 2007). The dominant family cultural values and beliefs, economic and structural households' characteristics, and social support may vary remarkably across migrant subgroups and play a role in explaining childcare selection (Liang et al., 2000). In Italy, in addition to the constraints mentioned in the previous paragraph, other factors can influence family behaviours. First, most adult migrants are first-generation and therefore greatly influenced by the culture of their country of origin. In the literature on migration, country of origin is considered a proxy for cultural background (Ishizawa & Stevens, 2011; Kofman, 1999; Vitali & Arpino, 2015), and the Italian literature underscores how culture affects demographic behaviours, specifically family reunification and the path of family formation (Barbiano di Belgiojoso & Terzera, 2018; Terzera & Barbiano di Belgiojoso, 2019).

Based on this literature, we formulate our third hypothesis:

Hypothesis 3 (H3): Differences in models of family migration and cultural values between migrants of different countries of origin lead us to hypothesise that childcare needs and arrangements vary according to their country of origin.

## Data and methods

### Data

We created a pooled dataset by merging two national surveys conducted by ISTAT. The first survey was ‘Social Condition and Integration of Foreign Citizens’ (hereafter SCIF), conducted during 2011–2012, which sampled households with at least one member with foreign citizenship.<sup>3</sup> The second survey was ‘Multiscopo—Aspects of Daily Life’ (hereafter ADL), conducted in 2011, which sampled households in Italy.<sup>4</sup> According to ISTAT, the ADL survey, while including a small sample of migrants, is not representative of this population.<sup>5</sup> Both surveys used a two-stage design with municipalities as first-level units and households as second-level. Households were randomly selected from the Italian population register (Anagrafe). All members of the selected households were included in the sample, and computer-assisted personal interviews (CAPI) were used. The survey data include information on everyday life and cover a wide range of variables relating to the structure and characteristics of households, childcare decisions regarding young children, and socio-economic and demographic information. The SCIF survey reports information on 9553 households (25,326 individuals), while the ADL survey reports information on 19,636 households (47,609 individuals). Since our study focuses on informal childcare in Italy, we restricted our sample to families with at least one child aged 13 or younger and at least one parent. The ADL sample is composed of 4085 households. For the SCIF survey, we selected 3389 households, excluding mixed couples (i.e., couples with one Italian parent) because the survey does not provide information on their children, since they are Italians. For the same reason, we excluded single-parent families with Italian children only because the survey does not include childcare information on the latter. Hence, the final sample was composed of 2298 households. The pooled sample (migrants and natives) consisted of 6383 households. Detailed descriptive statistics for the sample and the analysed outcomes are provided in Additional file 1: Table S1. For some analyses we restricted the sample, using only the SCIF dataset. It should be noted that this national survey contains information only on individuals legally residing in Italy.

### Dependent variable

The outcome variable was parental childcare arrangements. In both surveys, this information was derived from a single question: ‘Who are the adults your child is with when he/she is not with his/her parents or at school?’; with different possible answers including ‘on their own’, ‘grandparents’, ‘adult siblings’, ‘relatives’, ‘neighbours’, ‘friends’, ‘childminders’, ‘young siblings’, ‘other unpaid individuals’ and ‘no need for childcare’, (i.e.,

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<sup>3</sup> We select migrants with foreign citizenship and for simplicity call them ‘migrants’ throughout the paper.

<sup>4</sup> We defined those individuals as Italians.

<sup>5</sup> The ADL survey includes the migrant population (the variable in the ADL dataset of 2011 is blanked out, with no option to select only Italians), but the number of migrants included in the sample was limited and specific migrants’ characteristics such as length of stay and country of origin are missing in the survey, for these reasons we opted to use the SCIF survey to represent migrants with foreign citizenship.

<sup>6</sup> The cases that declared using a childminder were excluded from the sample because this kind of childcare is not informal, as payment is involved. In Italy, households can rely on different types of formal childcare arrangements including childminders, after school clubs, private nurseries, among others. Due to the small number of cases (44 among migrants and 97 among Italians), this decision does not affect our results.

<sup>7</sup> As stated in the *Introduction* section, the category ‘no need for childcare’ includes all possible situations where parents can take care of their children (parental childcare), not entrusting the care of their children to anyone else. This category might also include households where the formal care (provided by schools and kindergartens) can be reconciled with family commitments and, therefore, the family does not need additional childcare. In both situations, households do not use informal childcare.

that need satisfied by formal or parental childcare). For analysis purposes, the dependent variable was 'informal childcare', composed of five categories: 'on their own' (reference category), 'grandparents', 'other relatives' (which includes informal childcare provided by adult or young siblings, and relatives), 'non-relatives' (which includes informal childcare provided by neighbours, friends, and other unpaid individuals), and 'no need for childcare'.

### Empirical strategy and main explicative variables

To test our research hypotheses, we applied a multinomial logistic regression and conducted two separate analyses.

In the first analysis, migratory status (migrants vs Italians; Table 1) was the main independent variable. Then, we investigated the role of parents' employment status in influencing families' no need for childcare, in relation to their migrant status (Fig. 1; completed results are shown in Additional file 1: Table S2). Furthermore, to overcome the Italians–migrants dichotomy, we examined any differences between Italians and migrants' area of origin (Table 2; completed results are shown in Additional file 1: Table S3). We estimated the same models, defining the main independent variable according to the mother's country of origin when available or the father's origin otherwise, showing the most important and numerous migrant communities living in Italy with children aged under 14: Romania, Albania, China, the Indian subcontinent, Morocco, Northern Africa, Sub-Saharan Africa, and Latin America.

In the second analysis, we examined childcare differences among migrant subgroups only, as defined previously (Fig. 2; completed results are shown in Additional file 1: Table S4), restricting the sample to the SCIF survey and using the area of origin as the independent variable (Romania, Albania, China, the Indian subcontinent, Morocco, and Latin America).

We used robust standard errors clustered by household, applying population weights provided in the datasets. First, we estimated the relative risk ratios. Then, for the first analysis, we presented our results by computing the average marginal effects (AMEs) to facilitate their interpretation. AME expresses the effect on  $P(Y=1)$  as a categorical covariate change from one category to another, or as a continuous covariate increase by 1 unit averaged across the values of the other covariates included in the model equations.

Finally, for the second analysis, to improve the readability of results we computed predicted probabilities of the outcomes with 95% confidence intervals for pairwise comparisons. In addition, confidence intervals were centred on the predictions and had lengths equal to  $2 \times 1.39 \times$  standard errors. This was necessary to obtain an average level of 5% for Type I errors in pairwise comparisons of a group of means (Goldstein & Healy, 1995).

In both analyses, we also considered other explicative variables which refer to household characteristics: household composition, including household type (single-parent family, couple [reference category], and composite household) and the presence of children older than 14 years; and parents' employment status (both employed [reference category], mother unemployed/inactive and father employed, father unemployed/inactive and mother employed, and both unemployed/inactive).

As previously stated, previous studies focused on the use of childcare services by parents with children aged 0–5 years, because compulsory education starts at 6 years old

in most countries, including Italy. However, households with children aged 6–13 years also have childcare requirements, especially outside school hours. Childcare needs for children 0–5 and 6–13 years old are different (Zamberletti et al., 2018); therefore, we analysed informal childcare use and arrangements for the two groups separately.

### Control variables

In all analyses, we included two sets of factors as control variables:

1) Household demographic and socio-economic characteristics. These include parents' highest educational level (primary [reference category], secondary, or tertiary); perception of the household's economic condition (very good/adequate [reference category] or poor/insufficient); and a variable called 'children's activities', which indicates children's participation in activities at the household level that could affect the need for childcare. For children aged 0–5 years old, the variable measures whether they attend kindergarten or preschool, while for children aged 6–13 years, whether they attend activities after school (neither kindergarten/preschool nor extra-curricular activities [reference category], at least one child attends kindergarten/preschool or extra-curricular activities, or all children attend kindergarten/preschool or extra-curricular activities).

2) Contextual factors. These include the area of residence<sup>8</sup> (north [reference category], centre, or south) and an indicator identifying territorial disadvantage (not at all/little [reference category] or enough/much). We calculated this indicator value by synthesising two dimensions. The first relates to the quality of the place of residence (dirty roads, difficulty finding parking, availability of public transportation, traffic, pollution, noise, parks, and risk of crime), while the second refers to the availability of services in the place of residence (pharmacy, emergency department, post office, police station, municipality, kindergarten, preschool, primary and secondary schools, and supermarkets). We calculated the mean among those variables and then normalised the dimensions to produce higher values for more disadvantaged contexts. These indicators allow us to consider the territorial variability in the services' availability, as highlighted by previous studies (Gabrielli & Dalla Zuanna, 2010).

Finally, when we restricted the analyses to the migrant population, we also controlled for migrants' duration of stay by considering the years of residence spent by the household forerunner in Italy.

## Results

### Differences in informal childcare use and arrangements between Italians and migrants

Table 1 shows the results of the multinomial logistic regression on the probability of parental informal childcare solutions for children aged 0–5 and 6–13 years, separately; AMEs are reported.

Results show that migrant status affects informal childcare arrangements. Being a migrant is related to a lower use of grandparental childcare. All migrant households, regardless of the age of the children, are almost 50.0 percentage points (hereafter, pp) less likely to rely on grandparents compared to Italians. However, migrants are more likely to adopt other solutions than grandparents. Compared to Italians, they are 11 pp

<sup>8</sup> Both surveys are representative only at the NUTS1 level and the only information available for the place of residence is the macro-area of residence (north-east, north-west, centre, south, and islands).

**Table 1** Probability of parental informal childcare arrangements by children's age

Variables	On their own	Grandparents	Other relatives	Non-relatives	No need
<i>Households with children aged 0–5</i>					
Migrants ( <i>ref. Italians</i> )	0.081 (0.066)	−0.491 (0.000)	0.171 (0.000)	0.033 (0.004)	0.207 (0.000)
<i>Household type (ref. Couple)</i>					
Single parent family	0.007 (0.664)	−0.047 (0.095)	0.022 (0.365)	0.136 (0.000)	−0.118 (0.000)
Composite household	−0.024 (0.002)	0.199 (0.000)	−0.012 (0.344)	−0.029 (0.006)	−0.135 (0.000)
Children aged 14–18 ( <i>ref. No</i> )	−0.034 (0.000)	−0.034 (0.163)	0.129 (0.000)	−0.021 (0.133)	−0.039 (0.099)
<i>Children's activity (ref. No)</i>					
At least one child	−0.011 (0.207)	0.012 (0.515)	0.020 (0.116)	0.036 (0.003)	−0.057 (0.001)
All children	−0.003 (0.741)	−0.001 (0.966)	0.029 (0.028)	0.018 (0.103)	−0.043 (0.014)
<i>Territorial disadvantage (ref. Not at all or little)</i>					
Enough or much	0.007 (0.324)	−0.004 (0.763)	−0.007 (0.476)	0.004 (0.674)	0.001 (0.954)
<i>Area of residence (ref. North)</i>					
Centre	0.015 (0.189)	0.062 (0.002)	−0.027 (0.032)	−0.020 (0.108)	−0.027 (0.158)
South	0.007 (0.493)	0.089 (0.000)	−0.017 (0.254)	−0.029 (0.011)	−0.050 (0.007)
<i>Highest educational level in the household (ref. Primary or none)</i>					
Secondary	−0.020 (0.237)	0.140 (0.001)	−0.052 (0.045)	−0.061 (0.037)	−0.007 (0.839)
Tertiary	0.023 (0.250)	0.122 (0.005)	−0.074 (0.010)	−0.073 (0.017)	0.001 (0.977)
<i>Parent(s)' employment status (ref. Both parents employed)</i>					
Mother unemployed or inactive	−0.015 (0.085)	−0.167 (0.000)	−0.013 (0.267)	0.003 (0.746)	0.192 (0.000)
Father unemployed or inactive	0.014 (0.533)	−0.109 (0.004)	0.012 (0.673)	0.011 (0.670)	0.072 (0.049)
Both parents unemployed or inactive	−0.034 (0.049)	−0.103 (0.030)	−0.002 (0.964)	0.029 (0.408)	0.109 (0.016)
<i>Perception of the household economic condition (ref. Very good or adequate)</i>					
Poor or insufficient	0.001 (0.851)	−0.032 (0.026)	−0.004 (0.673)	0.011 (0.260)	0.025 (0.087)
N. of households (unweighted)	3474				
<i>Households with children aged 6–13</i>					
<i>Household type (ref. Couple)</i>					
Single parent family	0.003 (0.802)	−0.001 (0.970)	−0.008 (0.677)	0.049 (0.011)	−0.043 (0.049)
Composite household	−0.029 (0.000)	0.220 (0.000)	−0.011 (0.527)	−0.063 (0.000)	−0.117 (0.000)
Children aged 14–18 ( <i>ref. No</i> )	−0.018 (0.009)	−0.126 (0.000)	0.205 (0.000)	−0.010 (0.348)	−0.052 (0.000)
<i>Children's activity (ref. No)</i>					
At least one child	−0.023 (0.004)	0.082 (0.000)	0.010 (0.559)	0.003 (0.811)	−0.071 (0.000)
All children	−0.017 (0.062)	0.047 (0.005)	−0.004 (0.793)	0.004 (0.718)	−0.030 (0.066)
<i>Territorial disadvantage (ref. Not at all or little)</i>					
Enough or much	0.012 (0.068)	−0.004 (0.759)	0.013 (0.250)	−0.009 (0.374)	−0.012 (0.332)
<i>Area of residence (ref. North)</i>					
Centre	−0.009 (0.265)	0.029 (0.118)	−0.011 (0.454)	−0.024 (0.072)	0.014 (0.430)

**Table 1** (continued)

Variables	On their own	Grandparents	Other relatives	Non-relatives	No need
South	0.004 (0.695)	0.093 (0.000)	−0.008 (0.570)	−0.050 (0.000)	−0.038 (0.015)
Highest educational level in the household ( <i>ref. Primary or none</i> )					
Secondary	0.015 (0.164)	0.141 (0.000)	−0.085 (0.002)	−0.063 (0.026)	−0.007 (0.806)
Tertiary	0.041 (0.004)	0.128 (0.002)	−0.104 (0.001)	−0.049 (0.116)	−0.016 (0.621)
Parent(s)' employment status ( <i>ref. Both parents employed</i> )					
Mother unemployed or inactive	−0.036 (0.000)	−0.111 (0.000)	−0.016 (0.191)	−0.002 (0.874)	0.164 (0.000)
Father unemployed or inactive	0.017 (0.419)	−0.119 (0.001)	0.021 (0.478)	0.055 (0.066)	0.025 (0.391)
Both parents unemployed or inactive	−0.047 (0.004)	−0.186 (0.000)	0.042 (0.271)	0.067 (0.089)	0.124 (0.004)
Perception of the household economic condition ( <i>ref. Very good or adequate</i> )					
Poor or insufficient	−0.004 (0.533)	−0.019 (0.190)	−0.018 (0.133)	0.001 (0.982)	0.041 (0.002)
N. of households (unweighted)	4113				

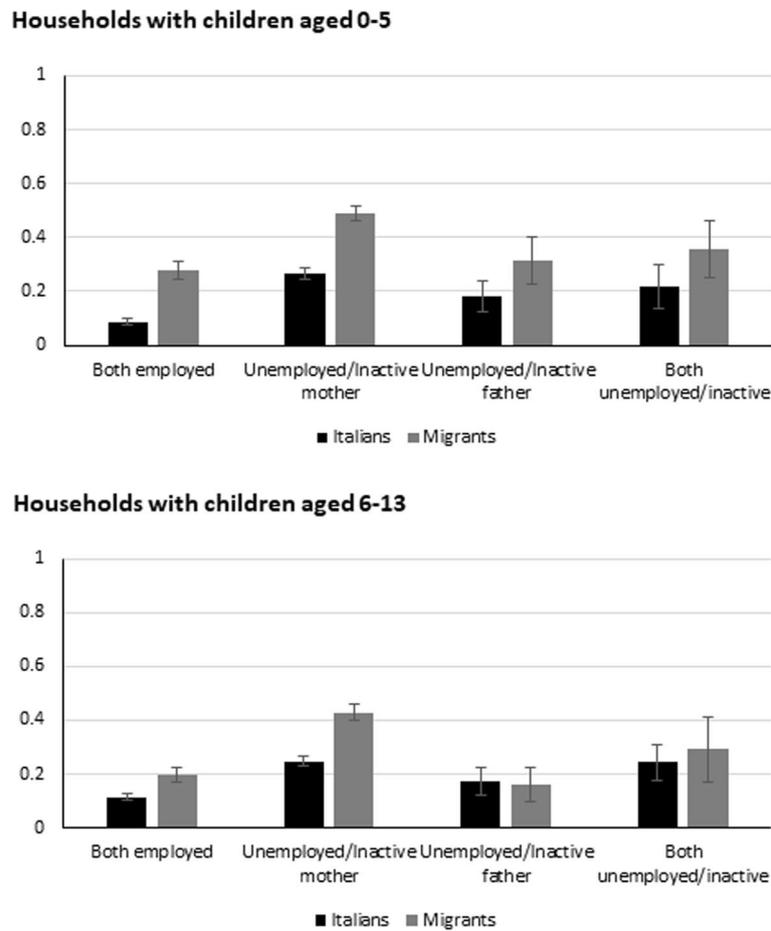
AMEs are reported. (1) Results from the multinomial logistic regression model. (2) P-values in brackets. (3) Models are weighted

Source: Authors' elaboration on SCIF (2011–2012) and ADL (2011) data

more likely to leave their school age children alone and 25.4 pp more likely to rely on other relatives. For the latter, the difference is reduced (AME = 0.171,  $p = 0.000$ ) among households with children aged 0–5, which are 3.3 pp more likely to rely on non-relatives than Italians. Finally, migrants with children aged 0–5 are 20.7 pp more likely than Italians to declare that they do not need childcare ( $p = 0.000$ ); the difference reduces to 12.1 pp ( $p = 0.000$ ) among households with children aged 6–13.

The results also suggest that household composition is one of the main factors behind parents' childcare arrangements, which in turn determines relevant differences between Italians and migrants. Among households with preschool-age children, single parent families are 11.8 pp less likely to declare that they do not need informal childcare and 13.6 pp more likely to use non-relatives' childcare than couples; conversely, as expected, composite households are more likely to rely on grandparents and less likely to leave their children to non-relatives than couples. Strong associations were observed among other household characteristics, varying according to the childcare solution analysed. Overall, the presence in the household of children older than 14 and younger than 19 years is positively related to the use of other relatives' childcare. Indeed, all households, regardless of the age of the children, are less likely to declare that they do not need childcare, and to rely on grandparental and non-relatives' childcare. Children's activity, namely attendance in kindergarten, preschool, and extra-curricular activities, is positively related to the use of almost all kinds of informal childcare solutions.

Regarding the contextual factors, the findings show that using informal childcare is not associated with a territorial disadvantage but depends on the area of residence. Overall, families living in the South of Italy are less likely to declare that they do not



**Fig. 1** Adjusted predicted probabilities of ‘no need for childcare’ by children’s age, migrant status and parents’ employment status. (1) Number of households unweighted. 0–5 years = 3,474; 6–13 years = 4,113. (2) Results from the multinomial logistic regression model are weighted and adjusted for household type, highest educational level in the household, perception of the household economic condition, presence of children aged 14–18 in the household, children’s activity, area of residence, territorial disadvantage and duration of stay. (3) Interaction terms with migrant status and parents’ employment status added to the multinomial logistic model. (4) Predicted probabilities refer to the population average. (5) 83.5% CI. Source: Authors’ elaboration on SCIF (2011–2012) and ADL (2011) data

need informal childcare and to rely on non-relatives. However, they are more likely to use grandparental childcare than families in the north. Conversely, differences between families living in the centre and the north of the country were detected only among households with children aged 0–5: families living in the centre are 6.2 pp more likely to rely on grandparents and 2.7 pp less likely to rely on other relatives than those living in the north.

Households’ demographic and socio-economic characteristics also play a role in shaping parents’ childcare arrangements. The higher the household’s educational level, the higher the probability of relying on grandparents, regardless of the age of the children; and the higher the probability of leaving the children alone, but only among households with children aged 6–13. The results also suggest that parents’ employment status is a crucial factor because it influences the family’s economic condition. Households with

**Table 2** Probability of parents' informal childcare arrangements by children's age. AMEs are reported

Migrants' area of origin (ref. Italy)	On their own	Grandparents	Other relatives	Non-relatives	No need
<i>Households with children aged 0–5</i>					
Romania	−0.002 (0.942)	−0.533 (0.000)	0.159 (0.000)	0.059 (0.013)	0.276 (0.000)
Albania	0.035 (0.083)	−0.409 (0.000)	0.188 (0.000)	0.048 (0.076)	0.139 (0.000)
China	0.083 (0.031)	−0.431 (0.000)	0.112 (0.006)	0.029 (0.398)	0.208 (0.000)
The Indian Subcontinent	0.118 (0.000)	−0.543 (0.000)	0.122 (0.000)	0.005 (0.832)	0.299 (0.000)
Morocco	0.147 (0.000)	−0.524 (0.000)	0.195 (0.000)	−0.017 (0.339)	0.198 (0.000)
Northern Africa	0.076 (0.022)	−0.633 (0.000)	0.352 (0.000)	−0.005 (0.864)	0.209 (0.000)
Sub-Saharan Africa	0.100 (0.005)	−0.655 (0.000)	0.213 (0.000)	0.153 (0.000)	0.189 (0.000)
Latin America	−0.003 (0.846)	−0.440 (0.000)	0.184 (0.000)	−0.028 (0.217)	0.288 (0.000)
N. of households (unweighted)	3474				
<i>Households with children aged 6–13</i>					
Albania	−0.009 (0.615)	−0.392 (0.000)	0.279 (0.000)	−0.023 (0.534)	0.145 (0.012)
China	0.032 (0.402)	−0.490 (0.000)	0.148 (0.022)	0.041 (0.447)	0.269 (0.001)
The Indian Subcontinent	0.067 (0.171)	−0.620 (0.000)	0.319 (0.000)	−0.049 (0.106)	0.284 (0.000)
Morocco	0.170 (0.002)	−0.516 (0.000)	0.232 (0.000)	−0.022 (0.457)	0.137 (0.003)
Northern Africa	0.003 (0.912)	−0.640 (0.000)	0.501 (0.000)	0.008 (0.870)	0.128 (0.051)
Sub-Saharan Africa	0.095 (0.069)	−0.642 (0.000)	0.229 (0.001)	0.062 (0.023)	0.255 (0.000)
Latin America	−0.021 (0.000)	−0.509 (0.000)	0.293 (0.002)	−0.065 (0.047)	0.303 (0.003)
N. of households (unweighted)	4113				

(1) Results from the multinomial logistic regression model. (2) P-values in brackets. (3) Models are weighted and control for household type, parent(s)' employment status, highest educational level in the household, perception of household economic condition, presence of children aged 14–18 in the household, children's activity, area of residence, and territorial disadvantage

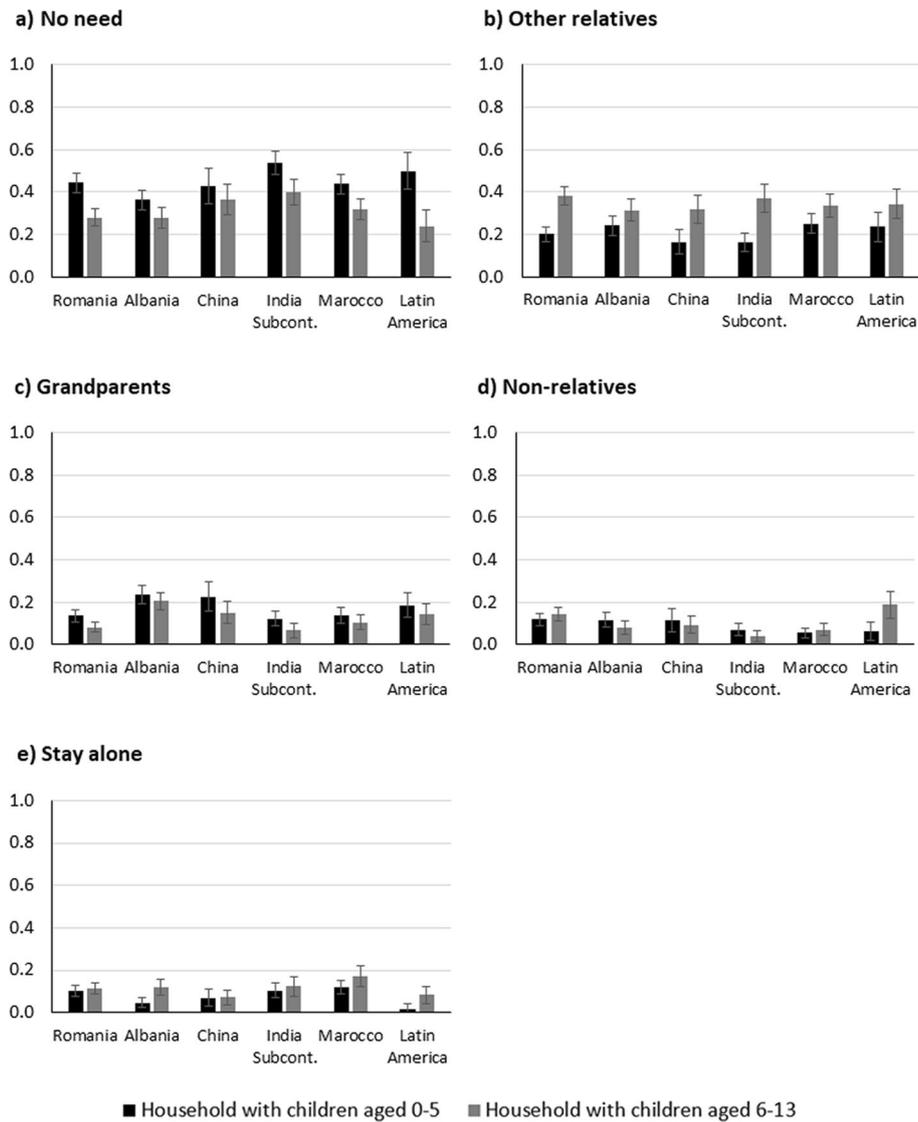
Authors' elaboration on SCIF (2011–2012) and ADL (2011) data

unemployed or inactive parents are more likely to declare that they do not need informal childcare, compared with households where both parents are employed. Similarly, households characterised by poor or insufficient economic conditions show the same pattern.

Specifically, Fig. 1 shows that households with unemployed or inactive mothers have a higher probability of declaring that they do not need childcare than the other groups, regardless of the age of the children, and this pattern is stronger among migrant households.

Thus far, we have considered migrants as a single, homogeneous group. Such analyses can obscure or mitigate differences among migrant subgroups since they are highly heterogeneous in household composition, education, labour market participation, social network in the host country, attitudes and behaviours in their origin country, and culture.

Table 2 reports AMEs of the previous analyses by migrants' area of origin. The direction of the relationship between the main explanatory variables and informal childcare arrangements is analogous to that obtained from the previous model (Table 1). However, in some cases, there are differences in the magnitude of such relationships between Italians and migrant subgroups, also depending on children's ages. Among households with



**Fig. 2** Adjusted predicted probabilities of parental informal childcare arrangements by migrant subgroups and children's age. *Notes:* (1) Number of households unweighted. 0–5 years = 949; 6–13 years = 965. (2) Results from the multinomial logistic regression model weighted and adjusted for household type, parent(s) employment status, highest educational level in the household, perception of the household economic condition, presence of children aged 14–18 in the household, children's activity, area of residence, territorial disadvantage, and duration of stay. (3) Predicted probabilities refer to the population average. (4) 83.5% CI. Source: Authors' elaboration on SCIF (2011–2012) data

children aged 0–5, migrants from China, the Indian subcontinent, Morocco, Northern Africa, and Sub-Saharan Africa are more likely than Italians to leave their children alone. All migrant subgroups, regardless of the age of the children, are less likely than Italians to rely on grandparents. However, the largest difference in the use of this childcare is observed between Italians and the Sub-Saharan group, who are 65.5 pp (among households with children of preschool age) and 64.2 pp (among households with children of school age) less likely to choose grandparental childcare than the reference category. Conversely, the smallest difference was detected between Italians and Albanians

(AME = -0.409,  $p = 0.000$  among households with children aged 0–5; AME = -0.392,  $p = 0.000$  among households with children aged 6–13).

As regards other relatives' childcare, all migrant subgroups are more likely to use this resource. For all households, the largest differences in the use of other relatives were observed between Italians and Northern Africans, and the smallest difference between Italians and Chinese.

Looking at non-relatives' childcare, some peculiarities emerge according to migrants' subgroups and children's ages. Among households with children aged 0–5, those coming from Romania and particularly those from Sub-Saharan Africa are more likely to rely on extra-family childcare with respect to Italians, while no differences were detected for the other subgroups. Among households with children aged 6–13, only Sub-Saharan Africans are more likely than Italians to use non-relatives' childcare. Again, no differences were observed for the other subgroups.

Finally, as previously stated (Table 1), all migrant subgroups were more likely than Italians to declare that they do not need childcare. The strongest effects were found among households with children of preschool age. Large differences were detected between migrants from the Indian subcontinent, Latin America, Romania, China, and Morocco versus Italians among households with children aged 0–5, and between migrants from Latin America, the Indian subcontinent, China, Sub-Saharan Africa and Romania versus Italians among households with children aged 6–13.

For the sake of brevity, we do not discuss control variables here because estimates are very similar to those obtained from the previous model (Table 1).

#### **Differences in informal childcare use and arrangements among migrant subgroups**

Previous results show that household composition plays an important role in shaping parental arrangements for informal childcare. For instance, as expected, the choice to rely on non-relatives is higher among migrants than Italians. However, this result might be affected by household composition, which typically differs between the two populations. Moreover, this effect might be smaller when focusing only on migrants, because they have all experienced migration and separation from their original families.

Figure 2 displays the adjusted predicted probabilities (hereafter, PPs) with confidence intervals for informal childcare arrangements according to migrant subgroups and children's age. In general, net of all controls, the likelihood of declaring no need for informal childcare is higher among households with children aged 0–5, to varying extents depending on the migrant subgroup. The results clearly show higher PPs for no need for informal childcare among families from the Indian subcontinent and Latin America, compared with other groups (Fig. 2a).

However, reviewing the childcare arrangements, the figure illustrates that migrants are more likely to rely on family members (grandparents or other relatives). Migrant households rely more on other relatives (Fig. 2b) and grandparents (Fig. 2c), and at the same time, they are less likely to use childcare provision by non-relatives (Fig. 2d) and to leave children on their own (Fig. 2e). Moreover, the use of other relatives' childcare is higher among households with children aged 6–13 than in households with school-age children. As regards grandparental childcare, regardless of the age of children, Albanian families show the highest probability of using this option: 24.0%, 95% CI [0.194–0.277]

among households with children aged 0–5; 20.6%, 95% CI [0.164–0.247] among households with children aged 6–13. Conversely, migrants from the Indian subcontinent have the lowest probability: 12.3%, 95% CI [0.086–0.161] among households with pre-school age children and 6.6%, 95% CI [0.032–0.100] among households with children aged 6–13 years (Fig. 1c).

Among migrants, the childcare choices of ‘non-relatives’ or ‘on their own’ were reportedly comparatively scarce. Latin American households with children aged 6–13 years rely more on non-relatives (18.7%, 95% CI [0.123–0.252]) than the other groups. In contrast, among families with children aged 0–5 years, the likelihood of choosing non-relatives is higher among migrants from Romania (11.9%, 95% CI [0.089–0.149], Albania (11.5%, 95% CI [0.080–0.149]), or China (11.2%, 95% CI [0.057–0.167]) than other groups (Fig. 2d). Finally, concerning the ‘on their own’ option, families with children of school age show higher PPs than households with children aged 0–5. Nonetheless, regardless of the age of the children, migrants from Morocco and the Indian subcontinent exhibit the highest probabilities compared to the other groups (Fig. 2e).

## Discussion and conclusions

As discussed in the introduction and literature review, extant studies in the Italian context include those on grandparental childcare (Arpino et al., 2010; Giraldo et al., 2011; Tomassini et al., 2004; Trappolini et al., 2021), childcare arrangements among migrant working mothers (Furfaro et al., 2020), and qualitative studies about migrants in precarious labour market positions who struggle to access formal care (Ambrosini, 2015; Bonizzoni, 2009). However, few studies have examined migrants’ use of informal childcare. To fill this research gap, the present work analysed differences in informal childcare arrangements among Italians and migrant subgroups in Italy, using two Italian surveys conducted by ISTAT from 2011 to 2012, to investigate how being a migrant might influence parents’ childcare needs and arrangements. We distinguished between multiple sources of informal childcare, which has not been carried out in previous research about migrants’ childcare arrangements.

We tested three main hypotheses. In the first hypothesis, we assumed that Italians and migrants have different childcare needs and solutions. The analysis confirms our expectation: we found that migrants have lower informal childcare need compared to Italians, supporting our *H1a*. The poor availability of formal childcare in the Italian familistic welfare model, together with the lower availability of grandparents and familiar networks among the migrants, entail lower childcare need compared with Italians. This result agrees with previous research on Polish migrants in London (Ryan, 2011a, 2011b) and in Dublin (Bojarczuck & Mühlau, 2018). Second, supporting our hypothesis *H1b*, migrants’ and Italians’ arrangements are substantially different; Italians have the availability of grandparents living nearby, thus, they rely more on grandparents compared to migrants, regardless of the age of the children. Here we can surmise that the explanation for such a result is related to grandparents’ availability. Indeed, Trappolini et al. (2021), analysing grandparental care among households with co-resident grandparents found that the resort to grandparents for childcare support is more likely among migrants in Italy than among Italians.

Conversely, migrants show a higher propensity to rely on support from other relatives (excluding grandparents) or non-relatives, or to leave their children alone. These last two results align with previous studies on migrants in Germany (Bünning, 2017) and on Irish migrants in Britain (Ryan, 2007), and could be explained by many first-generation migrants' lack of kinship networks, especially the lack of close family ties, which can make arranging childcare difficult, as previously found with regard to Polish migrants in London (Bargłowski et al., 2015), to Kazakh, Polish and Turkish migrants (Bilecen & Sienkiewicz, 2015) in Germany, and to Polish migrants in Dublin (Bojarczuk & Mühlau, 2018). As a result, friendship networks could make up for this lack of kinship networks.

In the second hypothesis, we expected families' childcare arrangements to depend on household characteristics (for both migrants and Italians). In line with previous studies on Irish migrants by Ryan (2007, 2011a, 2020) and on migrants in Italy (Furfaro et al., ), our results confirm the crucial role of household composition and specific household characteristics, namely, the availability of possible non-parental caregivers within the household, and parents' employment status, which increase parents' opportunities to receive informal support. The findings confirm our hypothesis *H2a*, households with siblings older than 14 and younger than 19 years rely more on other relatives and less on grandparents, compared with households with younger siblings only. In addition, we observed that composite households rely more on grandparents and less on non-relatives, compared with couples (*H2b*). Results also support our *H2c*. We found that households with unemployed or inactive parents show a lower propensity to use informal childcare, which may be due to the availability of at least one parent who takes care of children. According to previous studies (Kahn & Greenberg, 2010; Matthews & Ewen, 2006) unemployed or inactive mothers are primarily responsible for caring for their children, while employed mothers tend to entrust their children to someone else to reconcile work and family (Bonizzoni, 2014). As stated above, 'no need for childcare' refers also to households that can reconcile working and caring time within the family, for example, households with parents in part-time work. In this context, part-time employment allows parents to take care of their children after the time they spend in formal childcare. As shown by Airaghi and Garavaglia (2011), no need for childcare can also reflect the choice of parents to take care of their children themselves, a conscious choice to take charge of their children's upbringing even as they grow up, often to counter the effects of a society whose values they do not share. As stated, this pattern is even more pronounced when it is the mother who is unemployed or inactive, especially when the mother is a migrant. As the data reveal, poor attachment to work among migrant women (Bonizzoni, 2014; Mari-Klose & Moreno-Fuentes, 2013) leads to lower need for informal childcare compared with Italians.

Finally, our third hypothesis assumes that childcare needs and arrangements vary according to migrants' country of origin. Specifically, we expect migrants strongly attached to their culture to keep children's care within the family or the network of relatives or to rear their children outside the family. As expected, being a migrant in a familiar context constitutes a further constraint on childcare solutions. However, results illustrate that the apparent dichotomy between Italians and migrants conceals important differences related to areas of origin. The surveys used do not include all the elements needed to explain such differences. However, we can speculate that cultural norms,

geographical proximity, and the migration experience, which can affect family reunification and household structure (Barbiano di Belgiojoso & Terzera, 2018; Terzera & Barbiano di Belgiojoso, 2019), could explain our results.

We found that Albanians have a higher probability than Italians of declaring a 'no need for childcare', but when considering only migrant subgroups, they use the same arrangements for childcare providers and, importantly, have a higher likelihood of using grandparents compared with other migrant subgroups, regardless of the children's age. It should be noted that Albanians in Italy are a well-established and long-staying community with a high reunification rate (Barbiano di Belgiojoso & Terzera, 2018) and many 'zero-generation' migrants, i.e. the parents of first-generation migrants who followed their children to their destination country. Moreover, Albanians experience great fulfillment from grandparenting, since taking care of their grandchildren is their *raison d'être* (King et al., 2014). Conversely, migrants from Sub-Saharan Africa rely more than Italians on support from non-relatives (especially in households with young children) because their culture conceives of childrearing as a community task provided without charging a fee (for a review, see Mugadza et al., 2019), a long-standing tradition unlikely to erode soon. These differences support our third hypothesis (*H3*) and call for analyses to distinguish between different groups of migrants, as stated by Seibel and Hedegaard (2017).

Although we found differences between Italians and the different migrant subgroups, which can be ascribed to limited access to grandparents and other relatives among migrants compared with Italians, restricting the analyses to foreign-born households only, we found that familial childcare solutions also prevail among all migrant subgroups. In contrast, in migrant communities, non-relatives rarely look after the children. This suggests that, similar to Italian families, migrants prefer family members as a source of childcare when available. It might also indicate a process of adaptation to the familial childcare model (Furfaro et al., 2020) or a preference for grandparents and other relatives as caregivers.

Our results highlight the importance of considering the different sources of informal childcare separately, instead of considering informal childcare as a unique category. Moreover, the age of the cared children does not affect the choice of the parents, while the age of the siblings is crucial.

However, to determine the best explanation for our results, it would be necessary to compare migrants' childcare solutions with the arrangements made by migrants in other destination contexts, and with those of their counterparts in the context of origin.

Although this study contributes to the literature on migrants' childcare arrangements, the analyses are subject to some limitations, most of which are data-driven. First, the surveys do not specifically focus on the childcare (formal and informal) arrangements. Therefore, the missing reasons for choosing a specific type of informal childcare constitute an important limitation to our ability to interpret and explain the results. Second, due to the lack of information on formal childcare use, we could not adopt a competing risk approach between formal and informal childcare which would affect our results. Indeed, in some cases, informal childcare might complement formal services, while in others, it might be an alternative and the only source of support. Unfortunately, we cannot distinguish between these two cases. Nevertheless, as previously explained, the option 'no need for childcare' includes also households in which formal care coincides

with family commitments, partially overcoming this limitation. Third, the here used surveys do not provide information on the geographical proximity of caregivers, another important piece of information when analysing childcare which can influence childcare arrangements and use. Finally, in the ADL we cannot distinguish between migrants and natives since the variable is blanked out, with no option to select only Italians. However, according to ISTAT, even if the ADL survey includes a small sample of migrants, is not representative for this population.

Although the results relate to 2011–2012, they are also still relevant for two reasons. First, in Italy in the last decade, there has been no real change in family policies: for example, from 2012 to 2019, the coverage of public and private socio-educational services for early childhood did not grow, and Italy remained at the lowest rank in the European Union (Eurostat, 2012, 2019). In 2022 a single and universal allowance for children entered into force, in which the fragmented and uneven pre-existing measures converge. However, the effects of this policy are still not measurable. Second, in the last decade, the settlement of the first generation of migrants has intensified, primarily through reunification with children.

Despite these limitations, our study has an important practical application. The theme of childcare is strongly related to female participation in the labour market, and to families' fertility behaviours. As we discussed previously, the Italian welfare system does not provide enough support to reconcile work and family, thus making access to informal childcare an important resource. This issue is especially crucial for families with migrant backgrounds and affects their integration process, since unlike their non-migrant counterparts they generally cannot rely on a family network for support.

Finally, since migrants have diverse cultural norms related to childcare, further research using qualitative analyses could offer deeper insights into migrants' choices of specific childcare solutions in countries such as Italy, where the migrant population is composed of many communities increasingly established over the territory.

#### Abbreviations

ADL	Multiscopo—Aspects of Daily Life
AMEs	Average marginal effects
CAPI	Computer-assisted personal interviews
CI	Confidence interval
ISTAT	Italian National Statistics Institute
pp	Percentage points
PPs	Predicted probabilities
SCIF	Social Condition and Integration of Foreign Citizens

#### Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s41118-023-00196-8>.

**Additional file 1: Table S1** Households' main characteristics and distribution of the outcome for Italians and migrants by children's age. **Table S2** Probability of 'no need for childcare' by migrant status. AMEs are reported. Panelshows estimates for household with children aged 0–5, and panelaged 6–13. **Table S3** Probability of parental childcare arrangements by migrants' area of origin. AMEs are reported. Panelshows estimates for household with children aged 0–5, and panelaged 6–13. **Table S4** Probability of parental childcare arrangements by migrants' area of origin. AMEs are reported. Panelshows estimates for household with children aged 0–5, and panelaged 6–13.

### Author contributions

All authors contributed to the study conception and design. ET prepared the data and performed the analysis. ET and LT wrote the first draft of the manuscript. EBB and SR commented on this first draft of the manuscript and wrote a second draft of the manuscript. All authors read and approved the final manuscript.

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### Availability of data and materials

The data that support the findings of this study are available from the Italian National Institute of Statistics (ISTAT). Restrictions apply to the availability of these data, which were used under license for this study. Data are available <https://www.istat.it/it/dati-analisi-e-prodotti/microdati> with the permission of ISTAT.

### Declarations

#### Competing interests

The authors declare that they have no competing interests.

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