

# The Impact of Spatial Separation on Married Migrants' Health in Italy

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## Abstract

*Family separation due to migration is a life-changing event that can completely transform family structure and dynamics. Studies have mainly focussed on the emotional and psychological consequences of long-distance parenthood within transnational practices, while empirical evidence on the effects of transnational conjugality is still lacking. Based on data from the Social Condition and Integration of Foreign Citizens (SCIF) survey conducted by the Italian National Institute of Statistics - Istat, we studied the role of transnational conjugality on the self-reported health of married immigrants living in Italy. In addition, we examined specific situations that can lead to deeper health disadvantages for married immigrants living in transnational conjugality. Our results show that the negative effect on health of living a transnational parenthood is stronger for those immigrants that are not only living apart from their children but also are geographically separated from their spouses. Moreover, the effect of not living with a partner in Italy on self-perceived health is negative for immigrants who were not working, which seems to indicate a greater health disadvantage that is activated when immigrants are not able to economically achieve the goals of the migratory project.*

**Keywords:** transnational conjugality, self-reported health, Italy, ordinal regression models, migration strategies.

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## 1. Introduction

The migratory experience produces important changes within the family, often altering the equilibrium of individuals and threatening family cohesion (Boyle *et al.* 2008; Bryceson 2019). Generally, the departure from the country of origin affects previously established family dynamics, especially when it implies the spatial separation of the family (Parrenas 2010; Baldassar and Merla 2013). Indeed, migration also concerns individuals who have left their children or spouses behind (in the country of origin). This phenomenon is not yet quantifiable due to the lack of available statistical data to measure it (IOM 2020). However, given the growing diffusion of transnational families, most studies on this subject have used surveys that collect information on family members living in the countries of origin (Mazzucato and Dito 2018).

In the context of migration, family separation is often an overwhelming event that can transform the family environment, generating tension and emotional stress that can sometimes side-line authority and parenting skills (Ariza 2014), whilst children and adolescents can lose their affective references and their fundamental support while growing older (Lam and Yeoh 2019). The implications of this geographical distance can be equally significant when it occurs between parents and infants and when it implies marital separation. Several studies have suggested that the fragmentation of the family due to migration can cause strong effects for individuals, disrupting their physical and mental health (Mazzucato and Schans 2011; Nielsen and Krasnik 2010).

The main aim of this study is to examine the impact of marriage separation due to international migration on the health of married migrants living in Italy. For this purpose, we compared married immigrants living together with their spouses with their counterparts Living Apart Together Across Borders (LATAB) (Beauchemin *et al.* 2015; Mazzucato, Schans, *et al.* 2015) to better evaluate whether and how spatial marital separation influences immigrants' subjective health.

Studies on family migration and health have mainly focussed on the emotional and psychological strains that long-distance parenthood within transnational practices can produce on migrant parents (Fresnoza-Flot 2009; Dito *et al.* 2017) and on children who were left in the country of origin (Fan *et al.* 2012; Mazzucato, Cebotari, *et al.* 2015). Conversely, the transnational

conjugalità – concepita come una strategia di separazione della coppia mirata a soddisfare le esigenze della famiglia attraverso i benefici economici della migrazione – ha spesso trascurato.

Il nostro studio tenta di colmare questa lacuna e contribuire alla letteratura sul tema in due modi differenti: primo, integrando le ricerche sul matrimonio e la migrazione sottolineando l'importanza sia della salute fisica che psicologica, misurando quest'ultima attraverso lo stato di salute auto-riferito dei coniugati immigrati in Italia. Secondo, indagando gli effetti di interazione che possono generare un maggiore svantaggio sanitario per i coniugati immigrati che vivono in transnazionalità.

Il documento è strutturato come segue: nella prossima sezione, offriamo un sommario delle precedenti ricerche empiriche sui principali determinanti della salute e, più specificamente, sulla relazione tra famiglie transnazionali e salute; nella Sezione 3, presentiamo dati, metodi e statistiche descrittive sui coniugati immigrati in Italia e il loro stato di salute auto-riferito; nella Sezione 4, discutiamo i risultati dei modelli di regressione ordinale stimati; e nella finale Sezione, concludiamo con i nostri principali risultati.

## **2. Theoretical background**

### **2.1 Migration and Health**

Un gran numero di studi focalizzati sul benessere degli immigrati ha documentato un'ampia gamma di fattori micro- e macro-leva che influenzano lo stato di salute (Acevedo García *et al.* 2012; Zimmerman *et al.* 2011). Sia le evidenze teoriche che empiriche hanno mostrato che la salute degli immigrati è influenzata da caratteristiche demografiche, come genere, etnia e livello di istruzione (Malmusi *et al.* 2010; Wiking 2004), così come dal loro status socioeconomico (condizioni di vita e lavoro, incertezze economiche legate alla povertà materiale) (Borrell *et al.* 2008; Loi and Hale 2019). Inoltre, alcune caratteristiche personali e relazionali (per esempio, identità culturale, sostegno sociale) legate alle fasi della migrazione possono svolgere un ruolo importante nel benessere fisico e mentale degli immigrati (Bhugra and Jones 2001). In generale, la prima fase (pre-migrazione) e la seconda fase

of migration (period of physical transition from one country to another) induce psychological disorders that can differ or even disappear in the third stage (post-migration), depending on the influence of relational factors such as social context and network support.

Findings concerning the impact of gender and ethnicity on self-perceived health have been mixed. Some studies have found that immigrant women tend to report a worse health status than men seemingly for biological reasons (women live longer but less healthily than men) or due to their position in the labour market of the host country (Dzurova and Drbohla 2014). Females in migration are often employed in manual and difficult jobs which tend to favour discrimination (Pascoe and Smart Richman 2009; Borrell *et al.* 2008). This condition implies a feeling of frustration that may negatively affect their health status (Lynam and Cowley 2007).

In this regard, women are more likely than men to seek treatment. They frequently use medical services, facing difficulties related to language barriers or administrative procedures more easily than men. Greater attention to care may, in turn, lead them to declare a better health status than that reported by men (Rosano *et al.* 2017; Carella, Bellis and Rosano 2020).

The relationship between ethnicity and health is complex and varies over time and across countries. It is evident that migrants belong to heterogeneous groups with a specific identity, history, language and culture that may shape practices regarding health. Additionally, other factors related to the migratory project (forced or voluntary) or to the integration process (social isolation, loss of self-esteem due to economic conditions and job uncertainty) may impact on ethnic group differences in self-reported health (Chandola 2001; Nielsen and Krasnik 2010). Wiking *et al.* (2004) found that the association between ethnicity and poor self-reported health is mediated by socioeconomic status, poor acculturation and discrimination. Other scholars have documented that the differences among ethnic groups in reporting their health status are reduced when immigrants appear more integrated and receive greater social support in the host country and when their economic conditions improve (Lindstrom *et al.* 2001).

Less educated migrants have a higher probability of reporting a poorer general health. It has been suggested that more educated migrants have better skills and expertise to obtain better-paid jobs (Chiswick *et al.* 2008). As a

result, they may have a higher income which allows them to invest more easily in preventive medicine and specialist health services as primary care to prevent diseases (Rosano *et al.* 2017).

Migration experiences have often been related to unstable working conditions which, in turn, have been typically associated with lower self-rated health and higher risks of poor mental health, such as anxiety and depression (Borrell *et al.* 2008; Berkman *et al.* 2014; Benach *et al.* 2011).

Regarding characteristics associated with the migratory project, the literature has made a distinction between voluntary and involuntary migration. Usually, economic immigrants voluntarily leave their country of origin to improve their quality of life, and they are more likely motivated to integrate and eventually remain in the receiving country (Caarls and Mazzucato 2016; Barbiano di Belgiojoso and Terzera 2018). Moreover, a migratory project shared in post-migration experiences with spouses, dependents and relatives tends to facilitate social integration (Hou *et al.* 2018). All these factors lead to positive effects on perceived health status.

Regarding the Italian case, Carella, García-Pereiro and Pace (2020) showed that self-declared health status is positively associated with the sense of belonging as one of the components of married immigrants' subjective well-being. Indeed, authors have stated that a positive change in the health status (passing from a poorer to a better health category) increases the feeling of acceptance in the city where married immigrants live (i.e., moving from accepted to very accepted).

The duration of the stay in the receiving country also plays an important role on health status. Migrants have better health than their native counterparts upon arrival as a result of the 'healthy immigrant effect' which refers to the selective nature of the migration event (HIE) (Jasso *et al.* 2004). Their health status tends to decrease as the years of permanence in the host country increase, converging to the level of natives' health (Antecol and Bedard 2006; Loi and Hale 2019). This deterioration of the health status – associated with a longer duration of stay – has been explained by immigrant's poorer socioeconomic conditions, social exclusion, low acculturation and/or the adoption of negative health behaviours (Jasso *et al.* 2004; Wiking *et al.* 2004).

Regarding integration experiences, receptivity attitudes held by natives towards migrants can favour their identification and acceptance with the host society (Hou *et al.* 2018). A strong sense of belonging relates to significant interactions with other people, cultural characteristics and social trust; all these act together to improve integration processes and hence facilitate access to health care. Thus, immigrants who manifest the feeling of not being sufficiently accepted seem to be more vulnerable, especially with regard to their health.

Similarly, difficulties in accessing medical services are aggravated by a poor knowledge of the host country, which may be relevant to explaining the negative influence of immigrants' health status on access to health care and increased risk of poorer health (Carella, García-Pereiro and Pace 2020; Scheppers 2006).

## 2.2 Transnational families and health

A strand of literature that has examined the role of marital status and household characteristics on the living conditions of immigrants suggests that conjugality and family dynamics may strongly influence quality of life in the receiving countries (Frisbie *et al.* 2001; Caarls and Mazzucato 2016).

In general, a positive migration experience is associated with living as a couple or with the children, while separation from the members of the family represents a psychological stressor for the immigrants that could lead to a health decline (White *et al.* 2019; Mazzucato and Schans, 2011). In particular, the literature on transnational families has highlighted the negative effects of parent–child separation on migrant parents (Mazzucato *et al.* 2016; Dito *et al.* 2017; Haagsman *et al.* 2015) and on children left in the country of origin (Schmalzbauer, 2004; Donato and Duncan 2011; Mazzucato *et al.* 2014), often neglecting the consequences of transnational conjugality for married couples.

A transnational family, in which the members live in different nation-states and spend more time apart than together (Bryceson and Vuorela 2002), is a peculiar feature of the post-modern context characterised by important changes in demographic and socioeconomic behaviours that have led to a diversification of family patterns that includes migration (Cooke 2008). Empirical analyses based on the Italian case have distinguished among three

types of transnational families (Ambrosini 2008). These typologies differ from each other in the nationality of the migrants involved in the forms of transnationality, the frequency of their returns to the country of origin and for the migration project. In Italy, transnationalism generally concerns women who are separated in migration from other family members (Grillo 2007; Carella, García-Pereiro and Pace 2020).

When analysing this family model, most scholars have focussed on long-distance parenthood as the consequence of a parental decision to migrate and leave children behind in order to fulfil their needs and to guarantee them better opportunities (Parrenas 2001; Zontini 2004; White *et al.* 2019). In this sense, several authors have documented that ‘transnational mothering’ can be the source of psychological distress for migrant mothers as well as of emotional and behavioural problems in children who are left behind (Hondagneu-Sotelo and Avila 1997; Parreñas 2005a). The practice of at-distance-mothering – due to international migration – implies the delegation of child care to other relatives or caregivers (Fresnoza-Flot 2009; Parrenas 2010). Thus, the roles of family members are redefined and, quite often, grandmothers take charge of new childcare responsibilities in the country of origin while migrant mothers participate in the upbringing and education of their children across international borders (Parreñas 2001; Nobles 2011).

In some cases, the limited physical interaction that results from the geographical distance in transitional families is somehow compensated by the preservation of tight intrafamily relationships with members back home or living in other places (Le Gall 2005; Parreñas 2005b). The strength of these ties may have a positive impact on migrants’ well-being, generating the feeling of union across borders based on reciprocity and solidarity. Nevertheless, many studies have found that separation from children due to migration hinders migrant mothers from fulfilling the role of the main caregiver, favouring the feeling of guilt and a sense of frustration (Schen 2005; Horton 2009). These studies have also suggested that long-distance parenthood more negatively affects mothers’ health status than fathers’ because of traditional gender norms associated with care (Parreñas 2001; Bernhard *et al.* 2009).

A strand of literature on transnational practices has also emphasised the effects that parental migration has had on educational and health outcomes of children who have been left behind. The prolonged separation from the

parents and the loss of close relationships with them can cause emotional and behavioural problems in these children despite the economic benefits of migration (Dreby 2007; Nobles, 2011). However, some authors have argued that the perception of the quality of the long-distance parenthood may also vary according to the age of the child (Graham and Jordan 2012). Younger children tend to experience the feeling of abandonment, suffering more from the geographic distance from their parents than their older counterparts. Moreover, children who have been left in the country of origin are more emotionally distressed by separation from their mother than their father. Fathers are commonly seen as breadwinners and primary providers of the financial needs of the family (Aranda 2003; Fan *et al.* 2012; Mazzucato and Schans 2011), needs that can be satisfied through the remittances and that, simultaneously, justify migration.

Both mothers and fathers deal with the consequences of several material and emotive sacrifices for the purpose of improving family income and quality of life.

At the same time, both married men and women geographically separated from their spouses and their children experience extreme loneliness and sharper health deficits (Ariza 2014). Indeed, transnational conjugality derails the normal functioning of the couple given that the spatial separation from all family members implies high emotional costs for both migrant parents or spouses and their children left behind (Bryceson 2019).

Transnational conjugality in family and health migration has been understudied. This might be due to the widely shared idea that the spousal absence is temporary, awaiting couple reunification in the receiving country. However, it has been shown that not all couples spatially dispersed experience reunification (Beauchemin *et al.* 2015). The original migratory project often turns into a prolonged family separation that does not necessarily lead to either reunification or to marital or family disruption. Transnational conjugality practices are usually assumed within a couple strategy finalised to ensure better opportunities for all members through migration (Olwig 2002; González-Ferrer *et al.* 2012). Undoubtedly, the consequences of separation caused by divorce or by migration are distinct because these situations are experienced from different root causes. In the second case, an increase in the time spent separated and the geographical

distance tend to decrease well-being, increasing the risk of union dissolution (Boyle *et al.* 2008).

These disadvantages are more harmful to an individual's health when two or more factors interplay in the migration experience: the separation from the children who remained in the country of origin and the employment uncertainty due to a lack of work.

Job insecurity has severe consequences on overall health and triggers psychological distress because it undermines well-being and challenges the migratory project of migrant workers and their families (Haour-Knipe 2013). In particular, a large body of sociological and economic literature has documented that transnational migrants accept the emotional costs related to this type of migration by balancing it with the consequent economic benefits (Goldin and Reinert 2012). Improving the financial situation of the family through a stable job plays a central role in family decision making and on migration strategies (Schmalzbauer L. 2004; Ryan *et al.* 2009). Therefore, unemployment hits the strategic goal of the migration project and it loses its meaning. In this case, the price of the family separation might be too high by the loss of its economic compensation. Interestingly, the interaction between these factors induces a major risk of poor mental health, such as chronic stress and depression (Borrell *et al.* 2008).

Dito *et al.* (2017) examined the perceived health status and subjective well-being of Ghanaian transnational parents in the Netherlands and found that their health status was negatively associated with socioeconomic conditions and undocumented status. The authors argued that parent–children separation due to migration was not the main determinant that negatively influenced the well-being of transnational migrants. In this case, the determinant of migrant parents' frustration was the failure of their migration project, which meant an inability to economically support children and family members left behind.

This is the background supporting our research questions:

*RQ1: How and to what extent does spatial marriage separation affect married migrants' health in Italy?*

*RQ2: Is the relationship between transnational conjugality and immigrants' self-reported health status dependent on the additional stress generated by also being a transnational parent?*

*RQ3: What role might be played by the accomplishment and/or the fulfilment of the economic needs of the family in the relationship between marriage separation due to migration and the self-declared state of health of immigrants in the host country?*

### **3. Data source and methodology**

For the analysis of the self-perceived health of married immigrants in Italy, data was drawn from the first national survey on Social Condition and Integration of Foreign Citizens (SCIF) carried out in 2011–2012 by the Italian National Institute of Statistics - Istat.

The survey included 9,553 households that included at least one foreign citizen, providing information on 25,326 individuals. The main purpose of the survey was to provide a detailed portrait of several aspects of life and the integration process of foreigners living in Italy. The units of analysis were private households with at least one foreign-born member that were randomly selected from the Population Register. All members of selected households were included in the sample. Individuals under the age of 14 were interviewed through a parent or an adult family member. The family questionnaire was completed by the head of the household holding foreign nationality. The sample design followed a two-stage process in which municipalities were the first-level units and households the second-level units.

As the central aim of this paper is to test whether and how a living arrangement as a transnational partnership and/or parenthood influences immigrants' self-declared health status, we applied some important restrictions to the sample: 1) it includes only individuals classified as foreigners<sup>4</sup> at the time of the survey; 2) it excludes mixed marriages; and 3) it consists of married immigrants in two diverse conditions: a) living together in Italy or b) living apart together across borders (LATAB) – one living in Italy while the other was living abroad. Once these filters were applied, the final sample included 6,019 married immigrants.

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<sup>4</sup> This classification included all individuals with foreign citizenship at the time of the survey, those foreign born, and those with foreign citizenship (since birth).

Following the quantitative scale nature of the dependent variable, the role of independent variables was tested using ordered logistic regression models (ordinal)<sup>5</sup>. As shown in Table 3.1, independent variables included in model specifications were clustered in four groups: individual characteristics, features of respondent's migratory project, living in transnational families and subjective social integration.

**Table 3.1 - Definition of dependent and independent variables**

Variable	Definition and categories
<b>Dependent variable</b>	
Self-declared health status	Scale. Ranging from 1-poor- to 5 -excellent.
<b>Independent variables</b>	
<i>Individual characteristics</i>	
Female	Dummy. Coded 1 if respondent is female and 0 if male.
Working	Dummy. Coded 1 if respondent is working at the time of the survey and 0 otherwise.
Low educational level	Dummy. Coded 1 if respondent achieved a low educational level and 0 if achieved higher levels.
Macro-area of citizenship	Categorical. Coded 1 if respondent's citizenship is new EU countries, 2 for EU, 3 for North Africa, 4 for rest of Africa, 5 for Asia, 6 for rest of Asia and 7 grouping other countries of origin (this is the reference category).
Macro-area of citizenship	Categorical. Coded 1 if the respondent was living in the regions of the Northwest, 2 for Central regions, 3 for Northeast regions and 4 for those residing in the South (this is the reference category).
<i>Migratory projects</i>	
Agreed with migration	Dummy. Pre-migration. Coded 1 if the partner and offspring agreed with the decision to migrate, 0 otherwise.
Age at arrival	Quantitative. Immigration timing, measures individual's age at migration.
Years since arrival	Quantitative. Immigration timing, measures years passed since migration.
Intend to remain	Dummy. Coded 1 if the respondent declared an intention to remain in Italy, 0 otherwise.
<i>Social integration</i>	
Do you feel accepted?	Scale. 'Do you feel accepted in the city where you live?' ranging from 1 -not accepted at all to 4 -very accepted-.
Not able to interact	Dummy. Coded 1 if the respondent declared not been able to interact in Italian and 0 otherwise.
<i>Transnational families</i>	
Partner living abroad	Dummy. Coded 1 if the partner of the respondent lives abroad and 0 if both are living together in Italy. Having non-coresident children (23.50%) has been included as a proxy for transnational parenthood.
Transnational parenthood	Categorical. Coded 1 if the respondent has non-coresident children, 2 if the respondent does not have children and 3 if the respondent has children and they live in the same household (this is the reference category).

Source: Authors' elaboration based on SCIF

<sup>5</sup> Models run estimate the ordered log-odds regression coefficients (logit function) independent variables while holding constant the rest of the variables included in the models. The goodness of fit of the models was assessed using three different measures: pseudo R<sup>2</sup>, Log pseudolikelihood and AIC. The results of Brand tests performed showed that the parallel regression assumptions (proportional odds) of the ordinal logistic regression model have not been violated.

We used hierarchical regression analysis as a method for model comparison. This is particularly helpful to disentangle the specific contributions of certain predictors (predictors of interest) following a sequential order after controlling for other variables. By examining changes in adjusted  $R^2$  between model specifications, it is possible to determine the contribution of added variables of interest to the improvement, if any, on the proportion of variance explained by the model (Henderson and Velleman 1981).

Each group of independent variables was analysed separately and variables that were not significant were removed from partial models.

The first model (Model 1) includes individual characteristics of married immigrants living in Italy, such as gender, working status, level of education, area of citizenship and place of residence. In the next steps, (Model 2 adding migratory projects and Model 3 adding self-perceived social integration), we added variables that previous research has found to be important determinants of immigrant's subjective health status (Bhugra and Jones 2001; Lindstrom *et al.* 2001; Wiking *et al.* 2004). In the following step (Model 4), we introduced our variables of interest to test the effect of living in a transnational partnership or parenthood arrangement on immigrants' subjective health.

Estimations 5 to 7 included interaction terms aimed at identifying which effects on married immigrants' self-declared health status, if any, differed in certain situations. We introduced interaction effects to assess if there are some mediator variables influencing the relationship between living as transnational families and the self-declared state of health of married immigrants in Italy. More specifically, we have hypothesised two situations – that we interpreted as potential causes of the greatest health disadvantages – in which the relationship between subjective health status of married immigrants and Living Apart Together Across Borders (LATAB) will probably depend on: a) having non coresident children (*RQ2*) and b) not working (*RQ3*). As suggested by Harrell (2015), we included in model estimations all the variables that were utilised to compute interaction effects, even if they were not statistically significant (alone).

Descriptive statistics of married immigrants according to variables included in ordinal regression models are displayed in Table 3.2. Regarding the individual characteristics of married immigrants included in our sample, 51.01% were female, 67.31% declared themselves to be working and 17.35%

have a low educational level. When classified according to the macro-area of citizenship, slightly more than 55% of married immigrants were citizens of UE countries (23.8% from new UE countries) and 17.47% were citizens of Northern African countries. Almost 42% were residing in Northern regions of Italy.

**Table 3.2 - Descriptive statistics of variables included in empirical analyses**

	Mean %	Std. Dev.	Min	Max
<b>Individual characteristics</b>				
Female	51.01			
Working	67.31			
Low educational level	17.35			
<i>Country of citizenship</i>				
New EU countries	23.80			
UE countries	31.26			
North Africa	17.47			
Other African countries	6.36			
East Asia	7.19			
Other Asian countries	10.57			
<i>Macro-area of residence</i>				
Northwest	21.35			
Centre	17.95			
Northeast	20.15			
<b>Migratory projects</b>				
Partner/offspring agreed with migration	70.58			
Intend to remain in Italy	66.05			
Years passed since arrival	10.79	6.43	0.1	64
Age at arrival	30.12	9.90	1.0	75
<b>Transnational families</b>				
Partner living abroad	16.54			
Non coresident children	23.50			
Without children	14.85			
<b>Social integration</b>				
Do you feel accepted in the city where living?	3.30	0.62	1.0	4
Not able to interact in Italian	17.41			
<b>Dependent variable</b>				
Self-declared health status	4.09	0.80	1.0	5
<b>N</b>	<b>6,506</b>			

Source: Authors' elaboration based on SCIF microdata 2011-2012

Models also control for the characteristics of the migratory projects of respondents. In this regard, 70.58% of married immigrants' partners and offspring agreed with the decision to migrate and 66.05% declared their intention to remain in Italy at the time of the survey. The number of years passed since migration and age at arrival were 10.79 and 30.12 (mean values), respectively.

Transnational marriages are those partnerships in which the respondent (immigrant) is living in Italy while the partner (spouse) is living abroad. This category represents 16.54% of our sample of married immigrants. Transnational parenthood is identified by children who are not living with the respondent in Italy (23.50%).

Subjective social integration effects on self-declared health of married immigrants in Italy were approached by the question 'Do you feel accepted in the city where you live?', with a mean value of 3.30, as well as by language proficiency, with 17.41% declaring difficulties when interacting in Italian.

## 4. Results

Which individual characteristics are related to the self-declared health status of married immigrants living in Italy? Females and respondents who were working declared having lower levels of health in comparison to males and respondents who were not working or in another situation (Table 4.1). These findings support gender differentials in self-reported health that favour men, as found in recent studies on gender, health and ethnicity (Lynam and Cowley 2007; Borrell *et al.* 2008; Dzurova and Drbohla 2014). There is also a net effect of the educational level: those who have a low educational level have lower ordered logs of self-declared health than those who have achieved higher levels. The protective effect of the level of education for migrants' health might also be related to a higher likelihood of having better working conditions and higher income levels (Chiswick *et al.* 2008; Borrell *et al.* 2008; Benach *et al.* 2011; Berkman *et al.* 2014). The place of residence also influences self-declared health status of married immigrants. Results show higher ordered logits of a better health status for immigrants living in the North as compared to those living in Southern regions.

The addition of variables accounting for immigrants' migratory projects significantly improved the fit of the model (Table 4.1, Model 2). This is in line with previous studies in which variables accounting for the migratory history affect immigrants' health status in the host country (Hou et al. 2018). Regarding pre-migration, the ordered logit of better health for those sharing migration decisions is higher than for those who did not (log-odds = 0.187\*\*\*). The intention to remain in Italy, reflecting future migratory plans, is also positive related to the health status (log-odds = 0.329\*\*\*).

Results support those of the literature on the relationship between timing of immigration and health (Jasso *et al.* 2004; Wiking *et al.* 2004; Antecol and Bedard 2006; Loi and Hale 2019). The log-odds for declaring a higher level of health diminishes as both years passed since arrival and age at arrival increase. Thus, for one year of increase in the timing since the arrival to Italy, we expect a 0.0472 decrease in the log-odds of feeling healthier. This effect is larger when analysing the phase of the life course that signed the arrival – measured through the age of immigrants (log-odds = -0.0493\*\*\*).

In the next step, two variables intended to approximate the degree of subjective social integration were added (Table 4.1, Model 3). This addition not only improved model fit but also the proportion of variance explained. A one unit increase in the answer to the question 'Do you feel accepted in the city where you live?' (i.e., from accepted to very accepted) would result in an increase in the ordered logit of better health status (log-odds = 0.663\*\*\*). Especially important is the role played by language proficiency, which is negatively related to immigrants' health. Literature on this subject has stated that difficulty in interacting in the language of the host country is negatively associated with health care access, thus increasing the risk of a poorer health status (Krieger 2000; Scheppers 2006; Carella, Bellis and Rosano 2020).

What about immigrants who are living in transnational family relationships? Log-odds of ordinal models show that married immigrants with non-coresident children have a worse health status than those without children (Model 4), confirming the negative effects that parent-child separation has on migrant parents (Haagsman *et al.* 2015; Mazzucato *et al.* 2016; Dito *et al.* 2017). No significant results were found for either those with coresident children or for those involved in LATABs. However, as stated previously (see section Transnational families and health), health consequences of transnational

conjugality have often been neglected because the relationship linking both could be contingent on other conditions and added together, might generate a sort of cumulative disadvantage negatively impacting the health status of immigrants.

In fact, one of the most interesting findings, as initially hypothesised, is the moderator effects of having a partner living abroad (Table 4.1, Models 5 and 7). In the first place, the ordered log-odds linking having coresident children to the auto-perceived health status turn negative and highly significant for immigrants whose spouse is living abroad. Moreover, the negative effect of living a transnational parenthood – already found in Model 4 – gets even deeper among those involved in LATAB marriages. This might indicate that the greatest health disadvantage is for those immigrants that are not only living apart from their spouses but also a) have children for whom they provide care or b) are also living apart from their children.

Finally, there seems to be a substantial work-related gradient on the association between living in Italy without a spouse and self-reporting a worse health status. Model 6 displayed in Table 4,1 includes an interaction term between LATAB and working status. As can be observed, the effect of not living with a partner in Italy on self-perceived health is negative for immigrants who are not working. This result seems to point to a situation in which the migratory project has lost its sense (essence or main motivation). In most families, migration has been enacted with the intention to improve family wellness (Parrenas 2001; Zontini 2004; White *et al.* 2019). Migratory biographies are extraordinarily complex. In some cases, moving together is not a possibility, leading to the geographical separation of the family (being forced to leave the partner and/or the children in the country of origin). Living the migration experience far from the family might have profound negative consequences, such as favouring negative emotional states and rising psychological distress (Schen 2005; Horton 2009; Mazzucato and Schans 2011; Haagsman *et al.* 2015; Mazzucato *et al.* 2016; Dito *et al.* 2017; White *et al.* 2019), but somehow these effects might be moderated by the feeling that the main purpose of the whole migration experience is being accomplished. Immigrants who are working in the host country give sense to the migratory project of the family, which tends to compensate for the geographical separation caused by migration. On the other hand, not working

means, among other things, the loss of the economic advantage of migration, a situation that might deepen the distress already being lived while apart from a spouse. In this situation, the ‘costs’ of migration might be too high to be dealt with (Ariza 2014), heavily impacting health.

**Table 4.1 - Results of ordinal regression models (log-odds) on the determinants of immigrants’ self-perceived health status**

VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
<b>Individual characteristics</b>							
Female	-0.0623 (0.0543)	0.0868 (0.0552)	0.141** (0.0553)	0.137** (0.0557)	0.142** (0.0558)	0.151*** (0.0562)	0.157*** (0.0563)
Working	0.172*** (0.0617)	0.239*** (0.0625)	0.171*** (0.0634)	0.170*** (0.0644)	0.169*** (0.0644)	0.122* (0.0689)	0.119* (0.0689)
Low educational level	-0.564*** (0.0705)	-0.389*** (0.0705)	-0.302*** (0.0706)	-0.300*** (0.0707)	-0.299*** (0.0708)	-0.299*** (0.0707)	-0.298*** (0.0708)
<i>Macro-area of citizenship</i>							
New EU countries	0.0891 (0.0643)	0.203*** (0.0662)	0.226*** (0.0667)	0.217*** (0.0668)	0.221*** (0.0669)	0.211*** (0.0669)	0.215*** (0.0669)
EU	0.328*** (0.0817)	0.362*** (0.0852)	0.431*** (0.0862)	0.411*** (0.0865)	0.417*** (0.0866)	0.403*** (0.0866)	0.409*** (0.0868)
North Africa	0.294*** (0.108)	0.388*** (0.114)	0.523*** (0.115)	0.523*** (0.116)	0.527*** (0.116)	0.512*** (0.116)	0.516*** (0.116)
Africa (elsewhere)	0.208** (0.0965)	0.307*** (0.101)	0.518*** (0.106)	0.502*** (0.106)	0.502*** (0.106)	0.503*** (0.106)	0.503*** (0.106)
East Asia	0.134 (0.0866)	0.139 (0.0877)	0.265*** (0.0901)	0.255*** (0.0907)	0.259*** (0.0907)	0.243*** (0.0908)	0.247*** (0.0909)
Asia (elsewhere)	-0.151 (0.143)	0.0563 (0.144)	0.0371 (0.143)	0.0368 (0.143)	0.0316 (0.143)	0.0445 (0.143)	0.0395 (0.144)
<i>Macro-area of residence</i>							
Northwest	0.377*** (0.0647)	0.328*** (0.0656)	0.290*** (0.0657)	0.292*** (0.0660)	0.296*** (0.0660)	0.294*** (0.0660)	0.297*** (0.0660)
Centre	-0.0239 (0.0659)	0.00584 (0.0672)	-0.00868 (0.0676)	-0.0194 (0.0680)	-0.0167 (0.0681)	-0.0220 (0.0681)	-0.0191 (0.0682)
Northeast	0.220*** (0.0655)	0.194*** (0.0659)	0.181*** (0.0661)	0.180*** (0.0666)	0.181*** (0.0667)	0.181*** (0.0666)	0.182*** (0.0666)

Source: Authors’ elaboration based on SCIF

**Table 4.1** continued - **Results of ordinal regression models (log-odds) on the determinants of immigrants' self-perceived health status**

VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
<b>Migratory projects</b>							
Intend to remain	-	0.329***	0.239***	0.227***	0.225***	0.230***	0.228***
	-	(0.0511)	(0.0514)	(0.0531)	(0.0532)	(0.0531)	(0.0531)
Agree with migration	-	0.187***	0.169***	0.182***	0.181***	0.178***	0.177***
	-	(0.0539)	(0.0540)	(0.0550)	(0.0551)	(0.0550)	(0.0551)
Years since arrival	-	-0.0472***	-0.0580***	-0.0549***	-0.0552***	-0.0541***	-0.0544***
	-	(0.00440)	(0.00444)	(0.00453)	(0.00454)	(0.00453)	(0.00454)
Age at arrival	-	-0.0493***	-0.0507***	-0.0466***	-0.0469***	-0.0461***	-0.0463***
	-	(0.00260)	(0.00261)	(0.00295)	(0.00297)	(0.00297)	(0.00299)
<b>Social integration</b>							
Do you feel accepted?	-	-	0.663***	0.668***	0.668***	0.669***	0.669***
	-	-	(0.0446)	(0.0447)	(0.0447)	(0.0446)	(0.0446)
Not able to interact	-	-	-0.132*	-0.123*	-0.129*	-0.125*	-0.130*
	-	-	(0.0724)	(0.0725)	(0.0726)	(0.0725)	(0.0725)
<b>Transnational families</b>							
Partner living abroad	-	-	-	0.120	0.471	0.189	0.563
	-	-	-	(0.0777)	(0.217)	(0.0821)	(0.224)
Non coresident children	-	-	-	-0.259***	-0.230***	-0.267***	-0.239***
	-	-	-	(0.0738)	(0.0825)	(0.0740)	(0.0826)
Without children	-	-	-	0.0349	0.0640	0.0344	0.0674
	-	-	-	(0.0755)	(0.0854)	(0.0755)	(0.0854)
<b>Interactions</b>							
With children*Partner living abroad	-	-	-	-	-0.393*	-	-0.410*
	-	-	-	-	(0.238)	-	(0.241)
Non coresident children*Partner living abroad	-	-	-	-	-0.419*	-	-0.449*
	-	-	-	-	(0.254)	-	(0.257)
Partner living abroad*Not working	-	-	-	-	-	-0.377**	-0.390**
	-	-	-	-	-	(0.185)	(0.185)
Log pseudolikelihood	-7262,8	-7022,1	-6881,9	-6874,1	-6872,5	-6871,7	-6869,9
Pseudo R <sup>2</sup>	0,01	0,043	0,062	0,063	0,063	0,063	0,063
AIC	14557,6	14084,2	13807,9	13798,1	13798,9	13795,3	13795,8
Observations	6,506	6,506	6,506	6,506	6,506	6,506	6,506

Source: Authors' elaboration based on SCIF

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 5. Conclusions

Previous studies on migrants' health in Italy have found that immigrants tend to report good health conditions which are generally better than those of natives (Petrelli *et al.* 2017). Other studies have suggested the need to enact adequate policies aimed at preserving such health heritage related to the 'healthy migrant effect' and prevent the worsening of immigrant's epidemiological conditions by facilitating their access to healthcare services (Carella, Bellis and Rosano 2020; Rosano *et al.* 2017).

In this context, we have attempted to contribute to research on this topic by investigating the factors that impact the health status of married immigrants in Italy, highlighting differences between those who live with their spouses and those who live apart together across borders. In doing so, we have also investigated interactions effects between the transnational conjugality and familial and socioeconomics characteristics that play a role in the worsening of immigrants' health status among those experiencing marriage separation due to migration.

In line with the exiting literature, our findings indicate that married migrants who are less educated, unemployed and with a longer stay are more likely to report a poor self-health status. In addition, a low language proficiency seems to be one of the major barriers in accessing healthcare. It has been documented that immigrants who are unable to interact tend to use medical services less frequently than natives and often receive low-quality health care (Antecol *et al.* 2006).

The first question in this study sought to determine if spatial marriage separation affects the self-reported health of married migrants in Italy (*RQ1: How and to what extend does spatial marriage separation affect married migrants' health in Italy?*). In this sense, our results point to a worse health status of married immigrants with non-coresident children as compared to those without children.

Concerning immigrants who live in Italy without their spouses, our analyses reveal that this marital situation interacts with separation from children and the working condition, contributing to further explain migrants' self-perceived health status.

In general, marriage has been understood as a protective factor in migration by providing social support. Thus, it has been positively associated with better health: married immigrants have a significantly higher health score than singles, divorced and widowed immigrants (Newbold 2005).

Nevertheless, ordered regression models in our study show that in Italy, the greatest health disadvantage is among married immigrants living with the absence of both their spouse and children (*RQ2: Is the relationship between transnational conjugality and immigrants' self-reported health status dependent on the additional stress generated by also being a transnational parent?*). These results lead us to believe that in transnational living arrangements, even if the migration project is mostly voluntary and shared with the whole family, the emotional costs produced by the spatial separation from family members are strongly harmful to an individual's health.

Likewise, when transnational conjugality and job insecurity – induced by the unemployment status – interplay with each other, immigrants' vulnerability related to health condition increases (*RQ3: What role might be played by the accomplishment and/or the fulfilment of the economic needs of the family in the relationship between marriage separation due to migration and the self-declared state of health of immigrants in the host country?*). In this case, in line with Gonzalez-Ferrer *et al.* (2012) and Dito and Mazzucato (2017), we may assume that being unemployed invalidates the reasons that should have compensated the feeling of guilt and helplessness produced by transnational conjugality. In other words, by failing the meaning of the migration strategy, married immigrants lose the main motivation that induced them to live separate from their family. As a result, their feelings of loneliness might intensify and increase their risk of experiencing physical and psychological problems.

In conclusion, our findings provide additional support for studies on transnational families in Italy and offer relevant empirical evidence that might be useful for future research on the subject.

Indeed, we believe that, besides a solid migration project, the interrelations between conjugality and other family dynamics are crucial to a better understanding of practices that regulate long-distance familial relationships.

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