Examining the Healthy Migrant Paradox across Age Groups and **Educational Levels in Europe**

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part of these health disparities between the two groups.

Short abstract (250 words)

The ability to age healthily highly depends on individual characteristics, such as gender, social class, biological, and migrant background, as well as contextual factors. Immigration has changed the demographic composition and the social structure of many western European countries and this has raised interest in how immigrants are ageing. This paper aims at examining the health of immigrants versus natives for individuals aged 50 years old and over using European longitudinal data from the Survey of Health, Ageing and Retirement (SHARE) across 7 waves (2004-2020). We use descriptive and multivariate models to analyze the association between migration status and health outcomes (chronic conditions, self-perceived health and GALI). In addition, we examine how this association varies across age groups and education levels, exploring two separate interactions: (1) the interaction between immigration status and education on health, and (2) the interaction between immigration status and age on health. The expected findings include support for the healthy immigrant paradox, but our results differ across countries and type of immigrants. We also expect that the better position of migrants based on their educational attainment might explain

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Extended Abstract (2-4 pages)

Theoretical focus

The literature on healthy ageing postulates that the effect of age on the development of chronic health conditions is heterogeneous and highly dependent on individual and social context (Kristiansen et al., 2016). While older people are more likely to suffer from multimorbidity (multiple simultaneous health conditions), the speed at which people's health deteriorates differs depending on sociodemographic and individual factors such as gender, race/ethnicity, socioeconomic status, and life experience (Cezard et al., 2021). As the immigrant population of Europe ages, it is fundamental to understand how ageing and health varies from their native-born counterparts.

The healthy immigrant paradox refers to the common occurrence that, upon arrival to the receiving country, immigrants tend to present better indicators of healthy ageing than the native-born group. This may be explained by positive selection in the origin country, since only those with good enough health, resources and energy to migrate are able or willing to go through an arduous migration process (Feliciano, 2020). On the other hand, multiple studies show that these health indicators tend to decline and converge to those of natives as time passes (Argeseanu Cunningham et al., 2008; Bousmah et al., 2019; Solé-Auró & Crimmins, 2008). This may be due to acculturation processes of immigrants, as they adopt unhealthy customs of their current country, but it may also be influenced by the stress, discrimination, limited access to resources such as health services and reduced social support that are commonly experienced upon migration (Berry, 2005; Ward & Geeraert, 2016).

While there is a considerable body of research supporting the healthy immigrant paradox, studies also show a wide range of heterogeneity among countries and immigration backgrounds. For example, non-European immigrants have shown better health outcomes in countries with pro-immigration policies (Giannoni et al., 2016).

Migration-related health inequalities are also highly dependent on the work conditions and socio-economic situation of individuals (Solé-Auró et al., 2012).

Solé et al's study in Spain shows that migrant status significantly increases the probability of being employed in a high-risk occupation, as well as developing a disability (Solé et al., 2013). Similarly, in Germany, a study found that immigrants' health decline occurs significantly more rapidly among those working in more physically demanding jobs (Giuntella & Mazzonna, 2015). In the case of undocumented immigrants, these issues become aggravated by their difficulty in exercising their right to healthcare, as André and Azzedine report in the case of France (André & Azzedine, 2016).

In this paper, we turn the lens to Europe, to complement the existing literature on immigrant's health by examining immigrant-native disparities in health for individuals aged 50 years old and over using longitudinal data from 2004 and 2020. To do so, we follow three steps: first, we examine the heterogeneity of the demographic and social characteristics as well as the health conditions between immigrants and natives. Second, we explore how the healthy immigrant paradox varies using three health measures across three age groups that allow us to provide a more complete view of the appearance of several health outcomes and two education levels. And finally, we analyse how the origin of our immigrants (grouped by PIB per capita) might influence their health differences. Overall, this should be among one of the most highly relevant social and public health concern today.

Data and Measures

This study uses the Survey of Health, Ageing and Retirement in Europe (SHARE), a cross-national panel dataset containing individuals from 28 European countries. We use waves 1 through 2008 (2004–2020), not considering wave 3 as it did not focus on the participants' current medical state. We exclude spousal participants who were younger than age 50 at the time of the survey. Since our focus is on the heterogeneity within European population, we did not include participants from Israel in the analysis. Our final sample size across the seven waves is not included here as we are still working on the data cleaning.

Dependent variable

The study uses three health measures as outcome variables to compute immigrants and native-born differences in health: (1) chronic health conditions, (2) self-perceived health and (3) the Global Activity Limitation Indicator (GALI). The importance of studying these indicators is key for understanding the appearance and the duration in life of different health measures across different age groups.

Explanatory and control variables

Our main explanatory variable is migration status. Participants were grouped into immigrants and non-immigrants. Immigrants were defined as those born in a foreign-country, and thus, any individual born in the country of residence is classified as native, regardless of nationality or parents' birthplace. The variable citizenship here is not considered as some immigrants might have the nationality of the country of destination before migrating.

The main independent variables are age groups and level of education. Age is grouped into 10-year age intervals: 50–59, 60–69 and 70–79. As for education levels, they follow the 2011 version of the International Standard Classification of Education(http://www.uis.unesco.org/education/pages/international-standard-classification-of-education.aspx): low (levels 0–2), medium (levels 3–4), and high (levels 5–6).

Then, we include several control variables in our analysis. Our demographic and living arrangements explanatory variables include the following: gender (female vs male); and marital status (married or in partnership – reference, never married, separated, divorced or widowed).

Statistical analysis

First, we conduct descriptive analyses of the demographic and social characteristics of the sample, as well as the health conditions (chronic conditions, self-perceived health and GALI), by immigrant and native-born populations. Then, in both cross-sectional and longitudinal perspectives, we explore how the association between migration status and health outcomes varies depending on age group and education level, examining the interaction between immigration

status and education on health, and the interaction between immigration status and age on health, using linear regression models.

Expected findings

We expect that our findings support the healthy immigrant paradox, but with substantial differences across countries. We also expect that the better position of migrants based on their educational attainment might explain part of these health disparities between the two groups. In addition, these disparities might be less pronounced when comparing to short-term immigrants. Chronic conditions might be higher for high-educated natives, but this might be mainly explained by three mechanisms: 1) underreporting of immigrants; 2) underdiagnosis of health problems in health surveys as individuals experiencing severe health problems may be unable or be less likely to participate in the survey; 3) immigrants with higher levels of education might generate higher level of health before migration and might be more capable of maintaining their better health after moving.

References

- André, J.-M., & Azzedine, F. (2016). Access to healthcare for undocumented migrants in France: a critical examination of State Medical Assistance. *Public Health Reviews*, *37*(1), 5. https://doi.org/10.1186/s40985-016-0017-4
- Argeseanu Cunningham, S., Ruben, J. D., & Venkat Narayan, K. M. (2008). Health of foreign-born people in the United States: A review. *Health & Place*, 14(4), 623–635. https://doi.org/10.1016/j.healthplace.2007.12.002
- Barnett, K., Mercer, S. W., Norbury, M., Watt, G., Wyke, S., & Guthrie, B. (2012). Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet*, 380(9836), 37–43. https://doi.org/10.1016/S0140-6736(12)60240-2
- Bousmah, M.-Q., Combes, J.-B. S., & Abu-Zaineh, M. (2019). Health differentials between citizens and immigrants in Europe: A heterogeneous convergence. *Health Policy*, 123(2), 235–243. https://doi.org/10.1016/j.healthpol.2018.12.005
- Cezard, G., McHale, C. T., Sullivan, F., Bowles, J. K. F., & Keenan, K. (2021). Studying trajectories of multimorbidity: a systematic scoping review of longitudinal approaches and evidence. *BMJ Open*, 11(11), e048485. https://doi.org/10.1136/bmjopen-2020-048485
- Feliciano, C. (2020). Annual Review of Sociology Immigrant Selectivity Effects on Health, Labor Market, and Educational Outcomes. https://doi.org/10.1146/annurev-soc-121919
- Giannoni, M., Franzini, L., & Masiero, G. (2016). Migrant integration policies and health inequalities in Europe. BMC Public Health, 16(1), 463. https://doi.org/10.1186/s12889-016-3095-9
- Giuntella, O., & Mazzonna, F. (2015). Do immigrants improve the health of natives? *Journal of Health Economics*, 43, 140–153. https://doi.org/10.1016/j.jhealeco.2015.06.006
- Kristiansen, M., Razum, O., Tezcan-Güntekin, H., & Krasnik, A. (2016). Aging and health among migrants in a European perspective. *Public Health Reviews*, *37*(1), 20. https://doi.org/10.1186/s40985-016-0036-1
- Solé-Auró, A., & Crimmins, E. M. (2008). Health of Immigrants in European Countries. *International Migration Review*, 42(4), 861–876. https://doi.org/10.1111/j.1747-7379.2008.00150.x
- Solé-Auró, A., Guillén, M., & Crimmins, E. M. (2012). Health care usage among immigrants and native-born elderly populations in eleven European countries: results from SHARE. *The European Journal of Health Economics*, 13(6), 741–754. https://doi.org/10.1007/s10198-011-0327-x
- Solé, M., Diaz-Serrano, L., & Rodríguez, M. (2013). Disparities in work, risk and health between immigrants and native-born Spaniards. *Social Science & Medicine*, 76, 179–187. https://doi.org/10.1016/j.socscimed.2012.10.022
 - Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current Opinion in Psychology*, 8, 98–104. https://doi.org/10.1016/j.copsyc.2015.09.021