HAW Hamburg
Faculty of Life Sciences
M.Sc. Health Sciences

The Impact of Migrant Integration Policies on Self-Reported Health of Migrants in Europe

A cross-sectional study based on the 2018-wave of the European Social Survey and the Migrant Integration Policy Index

Master Thesis

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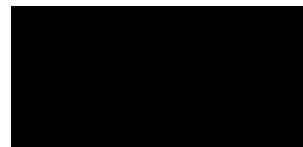**2nd Supervisor**: Prof. Dr Rahim Hajji [University of Applied Sciences Magdeburg-Stendal]

Integration Policies and Self-Reported Health of Migrants in Europe

Affidavit

I hereby affirm that I have written the paper entitled "The Impact of Migrant Integration Policies on Self-Reported Health of Migrants in Europe" independently and that I have not used any aids or sources other than those indicated.

29.09.2022

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Date   Signature

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Abstract

Background: Migrants' health in Europe is often reported to be poorer than natives, and they are constantly exposed to very different integration policies, which change from country to country. As the WHO strongly supports a Health-in-All-Policies approach, this study wants to examine whether or not this approach is visible in migrants' health data.

Method: This study uses data from the Migrant Integration Policy Index (MIPEX) and the European Social Survey (ESS). In a multilevel analysis with three different models, data from 2018 from 7 452 migrants living in 28 European countries was examined. Control variables on the individual and country level were used to investigate the connection of different migrant integration policies on self-reported health.

Results: More inclusive health policies have a positive and significant effect on the self-reported health of migrants, but only when controlling for variables on the individual level. All policies lose their significance when controlling additionally for political variables on the country level.

Discussion: Possible effects of policies on health might not be absent but mediated by other individual and political factors. The inconclusive results call for more research in the political area to better understand the mechanisms that influence the health of migrants in Europe following a Health-in-All-Policies approach.

Keywords: Integration Policies – Self-Reported Health – Migration – Multilevel Analysis – European Social Survey – MIPEX

Introduction

Health in All Policies

In 2013 the World Health Organization (WHO) published a "starter's kit" for the Health-in-All-Policies concept (World Health Organization, 2013). Health-in-All-Policies (HiAP) acknowledges the health implications that policies can have, even if they are on paper not directly related to health issues: "Many of the determinants of health and health inequities in populations have social, environmental, and economic origins that extend beyond the direct influence of the health sector and health policies" (ibid., p 7). This means that all forms of policy areas can influence one's health, which needs to be considered when policies are being made. Migration policies are no exception to that. Political agendas and migration policies are forming the framework of healthcare provision and the circumstances, living conditions and rights of migrating people. Therefore, it is no surprise that they play an essential role in the self-perceived health of migrants (e.g. Giannoni et al., 2016; Juárez et al., 2019; Malmusi, 2015; Nielsen & Krasnik, 2010). The often described *healthy-migrant-effect (HME)* explores the phenomenon of migrants sometimes reporting *greater* health outcomes than the native population. This *paradox* can be, for example, because young and healthy people are more likely to migrate in the first place (see also Razum et al., 2000).

Yet, in nearly every European country, migrants' health is often *poorer* than native-borns' health (Malmusi, 2015; Nielsen & Krasnik, 2010; Safipour et al., 2012). While this can partly be explained with reasons on the individual level (e.g. Madar et al., 2020), those differences can also be directly related to differences in policy measures (e.g. Giannoni et al., 2016). Standing in line with the HiAP-approach, a lot of research concludes that policy measures in the areas of health and elsewhere can be a driving factor in reducing inequalities in the self-perceived health of migrants, as well as in other health-related factors (e.g. Kööts–Ausmees & Realo, 2015; Nielsen & Krasnik, 2010; Walther et al., 2020). And there are not only differences in the self-perceived health between migrants and non-migrants. The health outcomes of migrants can also strongly and significantly differ based on the country they are living in (Safi, 2010).

Migration to and within Europe

As Europe will become home to a steadily increasing number of migrants, policies

aimed at improving the health of migrants in Europe will only gain importance. In 2018, the European Union (including the United Kingdom) had a population of around 513 million people. Compared to the year before, that is an increase of over 1 million, despite more deaths being recorded than births (European Commission, 2018). The still-to-be-seen growth can therefore only be explained by net migration. 10,5 % of the people in Europe live in a country they were not born in. As the worldwide migration rate is much lower (3,5 %), Europe can be seen as one of the most popular destinations for migrants from all over the world. In 2017 nearly 22 million people in Europe came from countries outside the European Union (bpb, 2022).

Global events like the climate crises, wars in Syria, Yemen or Afghanistan and other interconnected factors like worsening living and economic conditions in mainly developing countries will continue to force more and more people to face protracted displacement (Brown, 2008; Latek, 2019; UNHRC, 2022b). Climate change alone forced 26 million people away from their homes from 2008 to 2015. While at the same time, it is estimated that by 2050 more than 140 million people will eventually have to leave their homeland, as it will be inhabitable due to weather changes (United Nations, 2017).

Additionally, war and armed conflict forced more than 68 million people to move and migrate to different countries in 2018 alone (Latek, 2019). While many of these people migrate to nearby countries, migration to Europe will also increase with all likelihood. But people are not only coming from outside Europe.

Inner-European migration is also playing a significant role, with nearly 17 million Europeans living in a different European country than the one they were born in (bpb, 2022). While reasons for inner-European migration in the past mainly were economically or lifestyle-based (Bonin et al., 2008), the currently ongoing Ukrainian war is making clear that Europe is not invulnerable to other significant and more severe driving factors of migration. A UNHCR report from July 2022 reported over 6 million Ukrainian refugees seeking protection across Europe (UNHCR, 2022a).

Migrants being Subject to Integration Policies

Unpredictable events like these (in terms of length and dimension) are only a few examples of why migration was, is and always will be a pressing issue that needs to be politically addressed by the governments and political institutions of the

respective destination regions and countries. Economic migrants generally have more freedom in choosing a country that will provide a better future and the best political and general conditions. Refugees and other vulnerable groups of migrants on the other side have been forcefully displaced. They usually do not have the freedom of choice on where to go. Therefore, they are often faced with whatever political agenda the new country provides (or doesn't provide). In that sense, it can be observed that most European countries are following different political agendas when it comes to immigration policies (Solano & Huddleston, 2020). In this sense, worked out and more detailed migration policies and agendas might be of higher importance for countries with a high percentage of migrants like Luxembourg (45 %), Sweden (18 %), Germany (15 %) or the UK (13 %). Countries with a low migration population like Hungary (5 %), Slovakia (3 %), Poland (2 %) or Bosnia and Herzegovina (1 %) might have different political approaches (numbers from 2017, bpd). In Hungary, for example. migrants have to meet specific inclusion criteria to be eligible for health services, while in countries like Sweden the inclusion is unconditional (for more see Solano & Huddleston, 2020).

With the rising threat of progressing climate change and ongoing armed conflicts around the globe migration is and will be of contemporary importance. As a popular and wealthy destination target, Europe carries the responsibility to provide a well-functioning political framework to ensure the whole population's health. The connection between different integration policies of various European countries and subjective health seems worthy of exploring and understanding as well as possible. This study wants to contribute knowledge on where the political differences in integration-politics across Europe lay to efficiently develop recommendations for action for sound policies to ensure good health for all migrants in Europe. By acknowledging the Health-in-All-Policies approach, the focus will not only be on health policies but on various other policy areas as well. This approach allows us to get an idea of whether or not the HiAP-approach has a visible effect on the provided data of migrants in Europe.

Theoretical Background and Hypotheses
Self-Reported Health
Self-Reported Health describes the subjective feeling of one's general health and "expresses subjective assessment by the respondent of his/her health" (Eurostat,

2016). As in the European Social Survey, for instance, it is often measured with a single question: "How is your health in general?", given answer options on a 5-point-Likert-scale reaching from "very good" to "very bad". While this study will use the term *self-reported health*, it should be noted that various cited studies use the term *self-perceived health* synonymously (e.g. Nielsen & Krasnik, 2010).

Migrants

In this study, migrants will be defined as everyone living in a European country, with themselves or at least one of their parents being born in a different country than the one they are living in. This definition is, for instance, also used in Germany by the Federal Office for Migration and Refugees (BAMF), which defines migrants in Germany as follows: "…if she herself / he himself or at least one parent does not have German citizenship by birth" (BAMF, 2022).

Integration Policies

Integration policies can be defined as all policy measures dealing with frameworks and regulations addressed to migrants and all the conditions and circumstances that are uniquely or primarily related to the promotion of the migration process (MIPEX, 2020). The Migrant Integration Policy Index (MIPEX) sorts those migration-related policies into eight categories, as showcased in Table 1.

Table 1: MIPEX-Categories and their Assessment (Source: Solano & Huddleston, 2020)

Category	Assessment
Labour Market Mobility	Do immigrants have equal rights and opportunities to access jobs and improve their skills?
Family Reunion	How easily can immigrants reunite with family?
Education	Are education systems responsive to the needs of immigrant children?
Political Participation	Are immigrants granted the right and opportunity to participate in political life?
Permanent Residence	How easily can immigrants become permanent residents?
Access to Nationality	How easily can immigrants become citizens?

Anti-Discrimination	Is everyone effectively protected from racial/ethnic, religious, and nationality discrimination in all areas of life?
Health	Is the health system responsive to immigrants' needs?

These categories can be seen in the findings of various studies that explore the connection between different policy measures and self-reported health and are a fitting way to take the HiAP-approach into account.

Explanatory Approaches and Hypotheses

Nielsen and Krasnik (2010) conducted a systematic literature review where they included 17 European studies covering five different countries, eleven of which were based in Sweden. They focused on comparing self-perceived health among migrants and ethnic minorities with the majority population in Europe. While they found that "in regard to self-perceived health, most migrants and ethnic minority groups appeared to be disadvantaged as compared to the majority population even after controlling for age, gender, and socio-economic factors "(p 357), their conclusion also calls for improvement in migration policies as they are "essential to reduce ethnic inequalities in health" (p 357).

Another study by Giannoni et al. (2016), using data from the 2012-wave of the Eurostat EU-SILC (European Union Statistics on Income and Living Conditions) dataset, found significant connections between migrant integration policies and multiple measures of health, including self-reported health. Comparing 23 European countries, they noted that problematic integration policies significantly lead to poorer health outcomes (self-reported health status, limiting long-standing illnesses, self-reported chronic illness) among migrants. In their multilevel analysis, they explored six different models. They observed a *healthy migrant effect*, but it was only visible in countries with already well-functioning integration policies. The effect was no longer visual in countries "with problems in migrant integration" (p 11). They concluded that better migrant policies are a good way to tackle the health differences between migrants and natives.

A similar methodological approach was chosen by Malmusi et al. (2015). They used a cross-sectional study design to investigate further *immigrants' health and*

inequalities by type of integration policies in European countries. Using data from MIPEX and EU-SILC, they found that within 14 European countries, "different integration policy models appear to make a difference on migrants' self-rated health" (p 297). Further, they found that not only the self-rated health of migrants was poorer than the one of natives, but that the self-rated health was lower for migrants living in assimilationist (France, Switzerland, Luxembourg) and exclusionist (Austria, Denmark) countries compared to migrants residing in multicultural (the UK, the Netherlands, Belgium, Sweden, Norway, …) countries. The differences "persisted even after adjusting for differences in socio-economic situation" (p 293).

These findings about general integration policies suggest a connection between them and self-reported health. This leads to the formulation of the research question of this paper:

How do different migrant integration policies influence the self-reported health of migrants living in different European countries?

However, a closer look at the impact of the different policy categories from MIPEX (see Table 1) on self-reported health is needed to formulate detailed hypotheses.

Anti-Discrimination, Labour Market Mobility and Health

The results of the study from Wiking et al. (2004) can lead to assumptions about the connection between self-reported health and integration policies in Anti-Discrimination, Labour Market Mobility and Health. In their cross-sectional study, they analysed data of 4 410 immigrants and native-borns in Sweden about the association between self-reported health and ethnicity. Using logistic models with stepwise integration of variables, they found that "the strong association between ethnicity and poor self-reported health seems to be mediated by socio-economic status, poor acculturation, and discrimination" (p 574). This leads to the assumption that anti-discrimination policies can help increase self-reported health. But the authors also conclude that next to anti-discrimination policies, the policy areas of labour market mobility and health are also important. They mention that "immigrants also need a swift introduction to the new labour market" (p 580) and that "health education and health promotion in general, targeted at specific

deprived and immigrant groups must be performed" (p 580) to improve the migrants' conditions.

Especially the importance of labour market mobility and healthcare is further emphasised by another study coming from Norway. Here, Madar et al. (2020) used quantitative data from 221 Somali immigrants in Oslo to find that poorer self-reported health was strongly associated with being unemployed and other health-related factors (e.g. sleeping problems, diabetes). In their conclusion, they call on healthcare providers to implement intervention programs adjusted to the needs of migrants, which are strongly directed by policy measures.

Further, another systematic review from 1995 from the Netherlands already showed that policy-lead measures in the area of migrants' health can lead to better health outcomes among migrants, as they, for instance, can help to lower the rate of infectious diseases and mortality (Venema et al., 1995).

Borrell et al. (2015) had a detailed look at the possible effects of anti-discrimination policies. Using a cross-sectional study design, they investigated various health outcomes like self-perceived health and perceived discrimination. 18 European countries were included and compared according to their national integration policies. According to the countries' political approach to migration policies, they were put into three categories: inclusive, assimilationist and exclusionist (see also Malmusi, 2015). With a sample of the European Social Survey of around 2 600 migrants from low-income countries (countries which by the time were not included in the list of the International Monetary Fund), they found an association between perceived discrimination and poor self-perceived health among women in exclusionist countries. Because this effect was not significant in more inclusive countries, Borrell et al. conclude that this might be "because of the effects of active integration and anti-discrimination policies" (ibid., p 10697) and that "public policies on integration of immigrant groups are important for reducing discrimination and its related health outcomes" (p 10697), one of which is self-perceived health.

Rodríguez-Álvarez et al. (2017), in their descriptive cross-sectional study conducted in the Basque Country in Spain about perceived discrimination and self-rated health, came to a similar conclusion. In their sample of over 3 400 people,

migrants who perceived discrimination "were 1.92 more likely to rate their health as poor […] than those who did not report discrimination" (p 390). In their conclusion, they mention the "need for implementing inclusive policies to eliminate […] discrimination" (p 390).

Based on the combined findings of these studies, a first hypothesis can be formulated:

> **H₁**: The self-reported health of migrants is better in countries with more inclusive policies in the areas of **Anti-Discrimination**, **Labour Market Mobility**, and **Health** compared to the self-reported health of migrants in countries with more restrictive policies.

Family Reunion, Long Term Residence, Access to Nationality

While Rodríguez-Álvarez et al. (2017) showcased the possible effects that anti-discrimination policies can have on the self-rated health of migrants, they also used the study's results to draw attention to two other policy areas that might affect the health outcomes of the migrants. They say that to reduce the negative impact of discrimination further, the "promotion of long-term residence and family reunion policies" (p 394) is of very high importance.

Especially the effect of family reunion policies is further emphasised by the study by Sand and Gruber (2018). They explored the differences between migrants and natives and a similar construct to self-reported health: subjective well-being. Using data from the Survey of Health, Aging and Retirement in Europe (SHARE) with a sample size of more than 100 000 people, they found that the subjective well-being was significantly lower in migrants compared to native-borns. This was especially true for Southern-, Eastern- and Non-European migrants. By also using data from MIPEX in their analysis, they additionally found that family reunion policies correlate with country differences in the subjective well-being of migrants. They conclude that policies like family reunion are a meaningful tool to better living and health conditions for migrants across Europe.

A 2019 published meta-analysis by Juárez and colleagues (2019) investigated more effects of non-health-targeted policies on migrant health. They included 19 studies and articles from 2000 to 2017 in their analysis. Their findings line with the assumption that policies, even if they are not directly targeted at health, influence

the health of migrants. They found that "in the integration phase, restrictive policies in general, and specifically regarding welfare eligibility and documentation requirements, were found to increase odds of poor self-rated health […]" (p 420). Especially welfare eligibility and documentation requirements are an essential part of how easy or hard it is to access the nationality of a new country and are showcasing another policy area with effects on the health of migrants. As they can relate their findings mainly to high-income countries (Germany, the Netherlands, Sweden, France, Norway, and more), they call for a health-in-all-policies approach to support and improve migrants' health.

Based on the combined findings of these studies, a second hypothesis can be formulated:

> **H2**: The self-reported health of migrants is better in countries with more inclusive policies in the areas of **Family Reunion**, **Long Term Residence**, and **Access to Nationality** compared to the self-reported health of migrants in countries with more restrictive policies.

Political Participation, Education

There are no studies explicitly exploring the connection between policies in the areas of political participation or education and self-reported health for migrants. However, some theoretical constructs can be found that investigate what impact this kind of policies can have on the health of migrants.

In 2005, Rijkschroeff et al. published an article about whether the educational policies on migrants in the Netherlands between 1970 and 2002 were a success or a failure. In their historical evaluation study, they take a specific look at the objectives of different policy measures that the Durch government took and whether or not these measures were successful. They do that by referring to empirical data from various sources. They conclude that a shift in policies from simply reducing socio-economic disadvantages to a greater focus on education of the migrants might have been a vital contribution "to the education success of minority pupils" (Rijkschroeff et al., 2005, p 431) and in general to a positive development for migrants.

A multilevel analysis by Engström et al. (2008) had a further look at *contextual social capital as a risk factor for poor self-rated health*. They conducted a cross-

sectional study using data from 31 182 citizens of Stockholm, Sweden. They measured the social capital with four different measures, including political participation: vertical social capital (political trust and participation) and structural social capital (civic and political participation). Results showed that the odds ratios for poorer self-rated health were higher when having medium-to-low social capital and, therefore, less political participation compared to high social capital with more political participation. These findings were also true for people who were born outside of Sweden. While, in conclusion, the association between self-rated health and social capital was only moderate, the results suggest that empowering the political participation of migrants might increase their odds of better self-rated health.

Based on the combined findings of these studies, a third hypothesis can be formulated:

> **H₃**: The self-reported health of migrants is better in countries with more inclusive policies in the areas of **Political Participation** and **Education** compared to the self-reported health of migrants in countries with more restrictive policies.

Methodology

European Social Survey

This study uses the latest data from the 2018-wave of the European Social Survey (ESS). The ESS has collected quantitative data from citizens from more than 30 European countries every two years since 2001. The most current data is from wave number 9 of 2018, which is used in this study. The ESS collects information on the behaviour patterns and attitudes of the population with a wide variety of variables. This also includes variables for self-reported health and other variables on the individual level. In the 2018-wave, 48 318 people participated in the survey, 7 452 of which being migrants according to the definition above.

Migrant Integration Policy Index

Every country, even within the European Union, has different political structures, so it can be challenging to measure or compare different integration policies. However, the project of MIPEX (Migrant Integration Policy Index) aims at providing "a unique tool which measures policies to integrate migrants in countries across

six continents, including all EU Member States" (MIPEX, 2020). Researchers, media, and governments have been using MIPEX data worldwide to assess and conduct meaningful processes dealing with migration policies. With a large set of indicators, they measure how good migrants can participate in society, categorising them into the eight policy areas introduced above (Table 1).

From each of the 56 MIPEX countries, which cover all EU Member States, as well as other European countries and countries in Asia, the Americas and more, experts in their respective fields, give points to several indicators for each category. They are then computed in a score, reaching from 0 to 100. A score of 100 means migrants have the same or at least similar rights as natives, and a score of 0 meaning they have very restrictive to no rights. The used MIPEX data is from 2018.

The Dependent Variable

The dependent variable of the analysis is Self-Reported Health. In the ESS, this variable is measured with the question "How good is your health in general?" (ESS Round 9 Data, 2018). Participants can choose from a five-answer scale, 1 being "very good" and 5 being "very bad". In contrast to objective health scales, for which one would need to ask for specific medical data from each participant, self-reported health relies on the subjective judgement of each person. It is, therefore, also based on each individual's subjective perception of health. It is commonly used in research to assess the subjective health of a sample or population.

The Independent Variables

Next to the already introduced MIPEX categories and their respective scores, three more variables on the country level will be included to control for differences due to different conditions based on the country the migrants live in.

The GDP per capita considers the countries' economic growth differences as research has shown connections between GDP per capita and various health-related factors like life expectancy (Swift, 2011). And as there is a growing tendency that countries spend more of their GDP on health care (OECD, 2022), it seems essential to include this variable to control for its possible effects on health at the individual level.

Another country-level variable which is included is the Gini-Coefficient. It measures the inequality of a distribution, in this case, the distribution of total

income within a country. The coefficient reaches from 0 to 1. A score of 1 means a total inequality, with all the income being distributed to only one person. While a score of 0 means that everyone gets the same income. As income distribution varies in every country and migrants are often at a disadvantage when distributing resources, the Gini-Coefficient is a valuable control variable at the country level for the analysis.

A third country-level variable is an Index for the Quality of Democracy (QoD). The QoD is one of many other political indicators of the Sustainable Governance Indicators (SGI) (Lopes et al., 2016). It considers how robust a country's democratic institutions and practices are. With various indicators, they assess the QoD by looking at electoral processes, access to information, civil rights and political liberties, and the rule of law. Each of these four categories contributes 25 % to the QoD-Score, which reaches from a score of 0 (very unstable and non-robust democracy) to 10 (very stable and robust democracy). As the connection between policies and self-reported health is being investigated, it is important to also include an independent variable that considers a country's political systems with its strengths and weaknesses. The used data from all three country level variables is from 2018. Further, variables on the individual level are included in the analysis. Gender (male, female), age (year of birth), marital status (married, civil union, separated, divorced, widowed, none), the highest level of education (measured by the International Standard Classification of Education [ISCED]), employment status (self-employed, family-business, employed, unemployed), household income (in decimals), and the time a person is living in their country are also taken into account.

Analysis of the Data

First, some basic descriptives were conducted to show the differences in self-reported health and integration policies in all European countries. Further, the statistical connection between the main variables is showcased through correlation analysis of the main variables before a multilevel analysis was conducted, using IBM SPSS Statistics Version 28. In contrast to a regression model, the multilevel analysis allows one to check for contextual factors that might be present and influential in the given data structure. In the given case, the different European countries were used as a context variable. This step follows the assumption that persons from the same country are more likely to give similar

answers compared to persons from a different country. The multilevel analysis allows dealing with this possible data bias by taking this assumption into account and making the analysis results more profound than a regression model. The estimates, significance levels, and R^2 can be interpreted in the same way as in regression: An Estimate-Value (also regression coefficient) shows by how much and in which direction the y-value (the dependent variable) would change if the x-value (the independent variable) were to increase by one unit. The R^2-value shows the fit of a model and tells how much the included independent variables of a model account for the variation in the dependent variable. Additionally, there is the BIC-value (Schwarz's Bayesian Criterion). The BIC value is an adjusted version of the log likelihood. It is not standardised, so a single value cannot be interpreted meaningfully. But in general, one can say that if the BIC value decreases, the overall fit of the model increases. The above-introduced control variables were included in the multilevel model in three steps. The first step only includes, next to the dependent variable, all the different MIPEX variables. The second model consists of the variables on the individual level, and the third model includes the country-level variables. Beforehand, the main assumptions of a regression (they apply in a multilevel analysis just the same) have been checked for: First, the predictor variables are all quantitative or categorical, while the outcome variable is quantitative and continuous. There is also no perfect multicollinearity with none of the correlations being above .80. Additionally, all predictors have a non-zero variance, there are no outliers of concern, and the residuals are normally distributed.

Sample Description

The used sample consists of 7 452 migrants from 28 European countries. The selection of countries relied on the intersection of countries shared by both MIPEX and the ESS. The countries with the most participants are Switzerland (667), Estonia (557) and Austria (461). The country with the least participants is Hungary (48). To adjust for these differences, weighting was applied for the primary analysis. Table 2 shows the description of the socio-demographic variables.

Table 2: Sample Description; N = 7 452

Gender	Male	46 %
	Female	54 %
Educational Level	ISCED Level 1+2	22 %
	ISCED Level 3+4	44 %
	ISCED Level 5+6	34 %
Age	14-19	6 %
	20-35	25 %
	36-50	27 %
	51-65	23 %
	>65	19 %
Living in country since	<20 years	48 %
	20-40 years	30 %
	41-60 years	18 %
	>60 years	4 %
Employment relation	Employee	81%
	Self-employed	9 %
	Working for own family-business	1 %
	None / Unemployed	
		9 %
Marital status	Married	49 %
	Civil Union	1 %
	Separated	1 %
	Divorced	10 %
	Widowed	7 %
	None	32 %

The gender distribution shows that there are slightly more women (54 %) than men (46 %) in the sample. With 44 %, most of the included migrants have an educational level according to the ISCED levels 3 and 4. The most prevalent age group, with 27 %, are the 36-to-50-year-olds, with only 6 % still being in their teens (between 14 and 19). Nearly half of the sample population (48 %) has lived in their respective country for less than 20 years and 81 % are employed. Finally, 50 % of the sample is married or in a civil union, and 32 % were in no relationship by the time of the questioning.

Results

To undermine the findings of the presented studies, Figure 1 shows the means of the self-reported health of migrants by country. All countries from which data was

being used are represented in it. It shows that there are visible differences in the self-reported health of migrants between European countries.

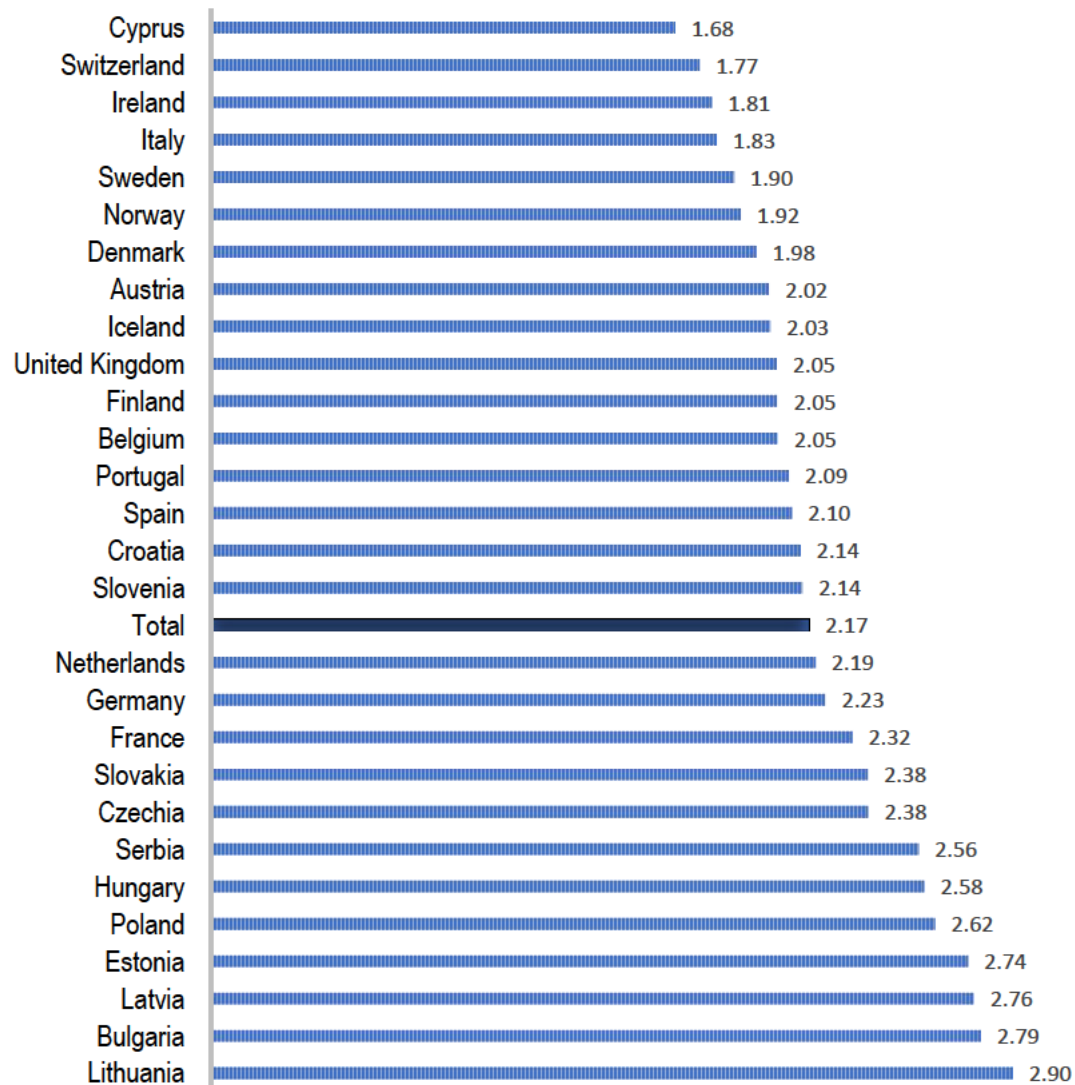| Country	Value
Cyprus	1.68
Switzerland	1.77
Ireland	1.81
Italy	1.83
Sweden	1.90
Norway	1.92
Denmark	1.98
Austria	2.02
Iceland	2.03
United Kingdom	2.05
Finland	2.05
Belgium	2.05
Portugal	2.09
Spain	2.10
Croatia	2.14
Slovenia	2.14
Total	2.17
Netherlands	2.19
Germany	2.23
France	2.32
Slovakia	2.38
Czechia	2.38
Serbia	2.56
Hungary	2.58
Poland	2.62
Estonia	2.74
Latvia	2.76
Bulgaria	2.79
Lithuania	2.90

Figure 1: Means of Self-Reported Health by Country (1 = very good, 5 = very bad)

A value of 1 represents very good self-reported health, and a value of 5 would represent very bad self-reported health. The countries where migrants report the best self-reported health on average are Cyprus (1.68), Switzerland (1.77) and Ireland (1.81). The countries where migrants report the worst self-reported health on average are Latvia (2.76), Bulgaria (2.79) and Lithuania (2.90). The total average of all included countries is 2.17.

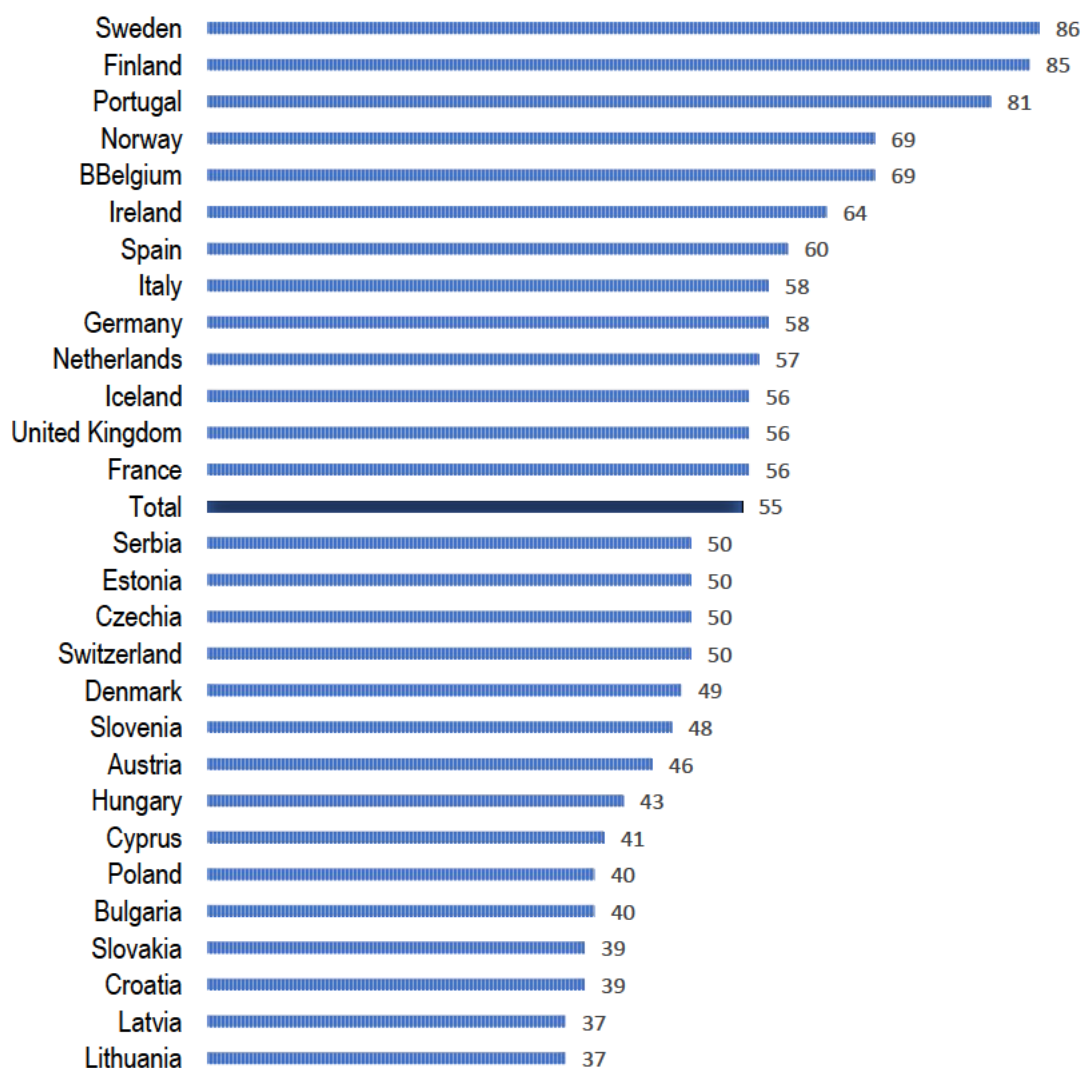# Integration Policies and Self-Reported Health of Migrants in Europe

Figure 2: Overall MIPEX-Score (2018) by Country (Range from 0-100)

These kinds of differences can also be seen in the MIPEX scores of the different countries. They reach from 0 (very exclusive, with few to no rights for migrants) to 100 (very inclusive, migrants have the same or similar rights as citizens). Figure 2 showcases the overall MIPEX scores of the respective countries. The overall score is the average of the eight scores from all the MIPEX categories (see Table 1). The countries with the highest overall MIPEX scores are Sweden (86), Finland (85) and Portugal (81). The countries with the lowest overall MIPEX scores are Croatia (39), Latvia (37) and Lithuania (37). The total average score of all countries is 55.

Integration Policies and Self-Reported Health of Migrants in Europe

Table 3 shows a correlation analysis between self-reported health and the independent variables. It shows that the overall MIPEX score, as well as five out of the eight MIPEX categories, are significantly (and negatively) correlated with the self-reported health of migrants. The three exceptions are Labour Market Mobility, Access to Nationality, and Political Participation. Pearson's Correlation

Table 3: Correlations between Self-Reported Health and independent variables (weighted)

	Self-Reported Health	
	Pears.-Corr.	Sig.
MIPEX		
Overall Score	-.067	< .001***
Labour Market Mobility	.005	.684
Family Reunion	-.029	.011*
Education	-.036	.002**
Political Participation	-.021	.067
Permanent Residence	-.029	.012*
Access to Nationality	-.014	.238
Anti-Discrimination	-.028	.017*
Health	-.171	< .001***
Individual Level		
Gender	.046	< .001***
Education	-.060	< .001***
Age	.322	< .001***
Time Living in the Country	.270	< .001***
Household Income	-.200	< .001***
Country Level		
GDP per Capita	-.092	< .001***
Gini-Coefficient	-.059	< .001***
QoD	-.018	.115

Significance-Levels: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Coefficient reaches from -0.17 to +0.01. The primarily negative correlations with the MIPEX scores are because a low score in self-reported health represents better health than a high score. Therefore, a negative correlation means that a higher MIPEX score correlates with better self-reported health. Further, nearly all independent variables on the individual and the country level correlate very

significantly with self-reported health. Better scores in self-reported health correlate additionally with better education, a higher household income, a younger age, less time spent in a country, being male, a higher GDP per Capita, and a higher Gini-Coefficient.

The main results of the multilevel analysis are shown in Table 4. In three different models, the independent variables were included step by step. Model 1 shows the analysis with only the MIPEX variables being included. The R^2 is with .041 relatively low. The BIC value of Model 1 is 17 737 and has to be compared with the BIC of Models 2 and 3 at a later point.

One can also see that only three of the eight policy categories are significant (* = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$): Family Reunion Policies with an Estimate of -.006**, Permanent Residence Policies with an Estimate of -.005** and Health Policies with an Estimate of -.015***. An Estimate of -.015 means that if the MIPEX health score were to increase by one unit, the score of self-reported health would change by -.015 units. As the scale for self-reported health is inverted (1 = very good self-reported health, 5 = very bad self-reported health), a lower score means better health. All the other policies and the overall MIPEX score are non-significant.

In Model 2, the variables at the individual level are included. This addition increases the model's overall fit, with R^2 increasing to .183 and BIC decreasing to 7 646. However, while health policies remain highly significant with an increased Estimate of -.021***, Permanent Residence and Family Reunion Policies lose their significance by including the new variables. Instead, several of the variables on the individual level are significant: Age with an Estimate of -.170***, being married (-.182*), being in a civil union (-.428**) or being in no relationship (-.283***). Also, time living in the country (.098***), being self-employed (-.163***) and household income (-.060***) are significantly related to the self-reported health of migrants.

The third Model adds the three variables on the country level: GDP per capita, the Gini-Coefficient and the Quality of Government Index.

Table 4: Multi-Level-Analysis (weighted)

	Model 1 $R^2 = .041$ BIC = 17 737		Model 2 $R^2 = .183$ BIC = 7 646		Model 3 $R^2 = .183$ BIC = 7 668	
	Estimate	Sig.	Estimate	Sig.	Estimate	Sig.
Constant Term	3.167	< .001***	3.089	< .001***	3.295	< .001***
MIPEX (0-100)						
Overall Score	.016	.228	.020	.495	-.002	.963
Family Reunion	-.006	.006**	-.004	.412	.001	.925
Education	-.003	.406	-.001	.997	.001	.861
Labour Market Mobility	.000	.926	-.001	.893	-.003	.628
Political Participation	-.001	.683	-.003	.473	-.001	.811
Permanent Residence	-.005	.005**	-.004	.064	-.005	.094
Access to Nationality	.003	.262	-.004	.430	.000	.987
Anti-Discrimination	-.005	.146	.000	.922	.002	.817
Health	-.015	< .001***	-.021	< .001***	.002	.127
Individual Level						
Gender (1 – Male; 2 – Female)			.036	.240	.037	.223
Education			.001	.756	.001	.732
Age			.170	< .001***	.170	< .001***
Married			-.182	.012*	-.184	.011*
Civil Union			-.428	.009**	-.419	.011*
Separated			-.147	.426	-.153	.406
Divorced			-.033	.694	-.033	.696
None			-.283	< .001***	-.286	< .001***
Time living in the Country			.098	< .001***	.099	< .001***
Self-Employed			-.163	< .001***	-.163	< .001***
Family Business			-.179	.135	-.175	.143
Household income			-.060	< .001***	-.060	< .001***
Country Level						
GDP per Capita					-.004	.204
Gini-Coefficient (0-1)					-.025	.328
QoD (0-10)					.140	.161

Contextual Variable: country
Significance-Levels: * = p < 0.05; ** = p < 0.01; *** = p < 0.001
Reference marital status: widowed
Reference employment relation: employee

All three variables are not significant in the Model and add no extra value to the general fit of the model, as R² and BIC remain (almost) unchanged. Some changes

can be seen for the variables already included in Models 1 and 2. The significance level of Health Policies drops from < .001 to .127 and is now non-significant. No notable changes appear with the variables on the individual level.

Summary

To conclude the results, let's have a look at the hypotheses that have been introduced above and see if the results can support them or not:

> **H₁**: The self-reported health of migrants is better in countries with more inclusive policies in the areas of **Anti-Discrimination**, **Labour Market Mobility**, and **Health** compared to the self-reported health of migrants in countries with more restrictive policies.

Through the first two Models of the conducted analysis, health policies are the only ones that remain a significant effect on self-reported health, but only when controlling for variables on the individual level. When controlled additionally for variables on the country level in Model 3, the effect becomes non-significant. The direction of the Estimate suggests that more inclusive health policies lead to better self-reported health of migrants throughout Europe. The same cannot be said about policies in the area of anti-discrimination and labour market mobility. The latest is not even significant in the correlation analysis.

> **H₂**: The self-reported health of migrants is better in countries with more inclusive policies in the areas of **Family Reunion**, **Long Term Residence**, and **Access to Nationality** compared to the self-reported health of migrants in countries with more restrictive policies.

Family Reunion and Long Term Residence Policies significantly affect self-reported health, but only in the first Model. Their explanatory power loses their significance in the second model. Policies for Access to Nationality show no significant effects.

> **H₃**: The self-reported health of migrants is better in countries with more inclusive policies in the areas of **Political Participation** and **Education** compared to the self-reported health of migrants in countries with more restrictive policies.

As the theoretical background for the policy areas of Political Participation and Education was already vaguer than for the other areas, it is less of a surprise that both show no significant effects in the main analysis.

Discussion

Limitations and Strengths

The selection of countries for this study was based on the intersection of countries with available data in both the ESS and the MIPEX to include as many European countries as possible. Other studies in this field use stricter excluding criteria like Kogan et al. (2018). They excluded most East European countries with "complicated demographic profiles due to the dissolution of the former Soviet Union" (p 1789). However, an extensive exclusion like this neglects a large part of Europe. As this study tries to draw a picture of at least the vast majority of Europe, it seems essential to include as many countries as possible.

In a similar context, other studies have also used a narrower definition of migrants in their sample. Both Malmusi (2015) and Borrell (2015), for example, only included migrants from low-income countries. But migrant policies and the law generally make no difference if a migrant comes from a high- or low-income country, whilst it is noted that possible effects can differ. Therefore, a compromise had to be made, and for this study, it was decided not to exclude any groups of migrants.

Further, only the latest data from 2018 for the ESS and MIPEX was used. No additional waves from previous years of the ESS or previous data from MIPEX have been included in the analysis.

As only one of the eight policy categories was found to be significant in the second Model and none in the third, one has to consider a further limitation rooted in a questionable validity of MIPEX. There have been studies using MIPEX before, where the policy indicators seem not to affect health-related outcomes of migrants (e.g. Hendriks & Bartram, 2016; Kogan, 2018). Hendriks and Bertram (2016) are trying to find a reason for this in the methodological approach of studies like this one and their own. They say that "it cannot be ruled out that the absence of an effect of integration policy is due to a limited validity of MIPEX even though this index currently offers the best available data to examine the quality of integration policy" (p 99). They also mention that even political leaders in Europe "such as

Angela Merkel and David Cameron, have acknowledged that integration policies have not been as effective as they hoped for" (BBC News Online, 2010, 2011 in Hendriks and Bartram, 2016, p 99).

Another reason for the absence of more significant effects of the MIPEX variables might be the mediating forces that lay in some of the control variables, especially on the political level. Hendriks and Bertram use the Quality of Government Index (QoG) by the World Bank, which is comparable to the QoD used in this study. Both are computed using various political indicators like political stability, the effectiveness of the government, regulatory power, the rule of law, etc. (Kaufmann et al., 2011; Lopes et al., 2016). The results indicate that they have explanatory intersections with the MIPEX variables, as their inclusion in the third analysis model leads to a non-significance in health policies.

Conclusion

The study's main result is that health policies do have a significant effect on the self-reported health of migrants throughout Europe, but only when controlling for variables on the individual level. Including variables on the country level seems to influence the effect. As mentioned above, the QoD might play a special role here, as it is the country-level variable that controls for political variance between the countries, just as the QoG did in the study of Bertram et al. (2016). Hence, in the paper on hand there was no other policy area that significantly affected self-reported health - one way or the other - when controlling for various variables. But the results can still indicate that the policies in the health area find their mark by improving the health of the migrants if they are promoting inclusiveness. Whether or not a country follows the goal of giving more inclusive rights to migrants is another story. Especially the meta-analysis by Juárez and colleagues (2019), who explored the effect of non-health targeted policies on self-reported health of migrants in Europe, is strong evidence pointing at visible effects in these areas.

Because of that, the results of this study seem to be humbling, especially if we remember the Health-in-All-Policies approach introduced at the beginning of this paper, and which is mentioned by Juárez et al (2019), too. However, as mentioned before, the fact that the visible effects of policies in the areas of Health, Family Reunion, and Permanent residence in the results seem to only get lost when including specific variables, there are reasons to the assumption that a lot of the effects of politics are not absent but mediated by other factors. This was already

noted in the introduction, when it was explained that elements on the individual level can strongly influence the self-reported health of migrants as well, like being unemployed, having diabetes, stress, or sleeping problems (Madar et al., 2020). Those individual factors were purposefully not included in the analysis, as the focus laid on the effect of policies. However, this can partly explain the relatively small R^2 value of .183. It showcases that there is much room for improvement in explaining the variance of self-reported health by adding or changing the model's variables. But as the main aim of this study was to have a specific look at the effects of policies, the small R^2 was to be expected and is no indication for a model with weak explanatory power in the given context.

Further, it must be considered that new policies that are being made need time to unfold their possible effects. While most recent policy adjustments can be taken into account by the team of MIPEX by increasing or decreasing their score for the respective year, the effects of such a policy adjustment might not be visible in the population data until a few years later. Hence, more research in this area would be helpful to understand the exact political mechanisms that influence the self-reported health of migrants, with a particular focus on the mechanisms between the political and individual factors. Longitudinal study designs might be a helpful tool to account for the time that policies can take to fully develop their intended (and unintended) effects on health. Europe is an incredibly diverse place not only in terms of culture but also in terms of politics, despite a lot of the countries being part of an overarching political structure, the European Union. To investigate more on whether or not the HiAP-approach is visible, "case studies" that focus on specific countries that are more similar to each other, rather than taking the full diversity of Europe into focus, could add significant value to the understanding of the already mentioned political mechanisms.

As the health policies in Europe are showing us already that they can have the potential of unfolding a beneficial impact on the health of migrants, the results call to political decision makers to focus on improving migration policies in Europe with a special focus on their effectiveness. The European Union already formulated priorities for the years 2019 to 2024 under the title "Promoting our European way of life: New Pact on Migration and Asylum" (European Commission, 2022). They state that this new system should be "an effective and humane way, fully in line

with our values and with international laws" (ibid.). As they further speak of "building confidence", "clear responsibilities" and "solidarity", the results of this paper call for an additional, very important aspect: the critical and scientific evaluation and supervision of the whole process that aims at improving the conditions of migrants.

The European migration politics have been heavily criticized in the past (e.g. Human Rights Watch, 2019; Riegert, 2020). And because the results of this study additionally illuminate missing effects of the intentions of migration policies, gathering and collecting more data for the often underrepresented group of migrants and analysing them to control for the intended effectiveness of the newly planned political measures would be a valuable contribution for further research in this area. At the same time, it allows to hold the EU accountable for the discrepancy between their political proclamations and their real political actions and measurable results.

This approach would therefore provide an important opportunity to learn more about policies (also non-health targeted) that influence the life of migrants in Europe, while at the same time controlling the principles, methods and ideas of the European Union, as well as promoting the WHO's Health-in-All-Policies approach in order to increase health-outcomes of migrants.

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