# Immigrants' subjective well-being in Europe: Variation by regional attitudes towards immigrants

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#### **Abstract**

Research suggests that migrants' well-being varies with their lived environment. This variation's potential but under-researched driver is non-migrants' attitude towards immigrants (ATI). Using pooled European Social Survey data (2010–18) for twenty-two destination countries, I address the question, 'Are more positive ATI in regions where migrants live associated with their higher life satisfaction?'. To answer it, I estimate models of life satisfaction regressed on a summed index of six measures of ATI aggregated to the regional level and control for individual-level predictors and country, year, and origin fixed effects. I find a significant association between more negative regional ATI and lower migrant well-being. Its strength is comparable with the most important known individual-level predictors of well-being (e.g., education). My descriptive results further show that the length of stay at the destination moderates the strength of association (only those more recently arrived are affected). Despite wellattested links between feelings of discrimination and well-being, I show that those who express greater discrimination are not more sensitive to ATI. This suggests that each measure speaks to a separate mechanism for experiencing discrimination. Showing that ATI is strongly related to migrants' well-being implies that the lived environment should be at the forefront of the migration outcomes research.

Keywords: attitudes towards immigrants; European Social Survey; immigrants' subjective well-being; perceived discrimination; inequality; quantitative methods.

# 1. Introduction

Immigrants migrate in the hope for a better life of their own and of their families (Hendriks and Bartram 2019). Yet, it is still not clear which living contexts are more conducive to immigrants' well-being, as destinations vary in their treatment of migrants. This

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is an important issue as life satisfaction is an indicator of immigrants' subjective well-being and hence a measure of successful integration and the success of their own migration projects (Baykara-Krumme and Platt 2018). A better understanding of the determinants of immigrants' life satisfaction, therefore, has the potential to enhance policy as well as speak to academic concerns.

The wider well-being research focusing on the general population emphasizes the role of contextual factors on individuals' life satisfaction (Dolan, Peasgood, and White 2008). However, most research on immigrants' well-being (Bălţătescu 2007; Amit 2010; Nandi, Luthra, and Benzeval 2020), with exceptions (Knies, Nandi, and Platt 2016; Kogan, Shen, and Siegert 2018), focuses primarily on the role of individual characteristics of immigrants (e.g., socioeconomic status). Yet, one key contextual factor expected to impact immigrants' well-being is the extent and character of their exposure to non-migrant populations. The non-migrants' behaviour towards foreigners can range from welcoming or antagonistic. Multiple studies have shown that perceived discrimination is consistently associated with lower life satisfaction among immigrants (Vohra and Adair 2000; Safi 2010). Other research studies employing indirect measures of contact, such as neighbourhood immigrant concentration, indicate that exposure to non-migrants could affect migrants' well-being in both directions (Sapeha 2015). Thus, it seems that it is not exposure to non-migrants per se but rather the character (positive/negative) of this exposure that matters. However, exposure's positive or negative nature cannot easily be captured with currently utilized measures (e.g., proxies of contacts in the form of neighbourhood composition, migrant concentration, foreign population rate). Therefore research that directly investigates the association of the nature of the exposure or the more or less favourable orientations towards immigrants with the life satisfaction of immigrants remains limited.

Therefore in this article, I focus on the nature (positive or negative) of the perception of immigrants as the relatively understudied aspect of the exposure of immigrants to non-migrants. In other words, through measuring the non-migrants' perception of immigrants, I focus on the nature of the context of their reception (positive or negative) rather than attempting to estimate specific intergroup contacts and their volume. Recently, a couple of papers (Heizmann and Böhnke 2018; Kogan, Shen, and Siegert 2018) ascertained a link between national attitudes towards immigrants (ATI) and immigrant wellbeing. I aim to further our understanding of this association by exploring its variation among different immigrant groups and exploring variation within individual countries.

Using five pooled rounds of European Social Survey (ESS) data from twenty-two European countries, I aggregate non-migrants' ATI on the subnational regional level. In this descriptive analysis, I employ ATI as a regional measure of greater or lesser hostility towards immigrants in their lived environment in destination countries. I investigate whether more positive local ATI in the areas where immigrants live are associated with their higher reported subjective well-being. Additionally, I control for the concentration of immigrants in the region as an indirect measure of exposure to account concurrently for the potentially positive association with ATI. Immigrant groups differ from each other in life satisfaction and key characteristics predicting it. As these variations may be correlated with variation in ATI, I control for various predictors of life satisfaction and these

migrant characteristics. To address my research interest, I measure well-being through self-assessed measures of life satisfaction.<sup>1</sup>

My paper's contribution is 3-fold. Empirically, I contribute to our understanding of variation in immigrants' well-being. My research design allows me to explain the variation in the association between exposure to non-migrants and well-being for a wider group of immigrants compared to previous studies focusing only on those self-identifying as discriminated. Aggregating the explanatory variable on the more granular sub-national level allows me to study the context of destination closer to immigrants lived environment (as in the environment in which they live) compared to cross-national studies. Secondly, from the policy-making perspective, knowing how particular non-migrants' ATI affects specific migrant groups can serve integration policies as ATI is a well-researched phenomenon. Research on how it links to immigrants can assist, for example, in identifying the migrant groups exceedingly affected by negative attitudes.

Finally, my methodological contribution is the introduction of ATI as a valuable complementary *explanatory variable* for the research of discrimination alongside variables of perceived/experienced discrimination and proxies of contact. My use of ATI avoids potential issues of endogeneity. As an aggregate measure, the ATI is not evaluated by respondents concurrently with life satisfaction and thus offers advantages over current estimates of the association between discrimination or prejudice and life satisfaction.

# 2. Background

Why is it relevant to ask whether local attitudes towards immigrants affect the life satisfaction of immigrants? The current literature in this area speaks to two main reasons. First, studies based on intergroup contact theory (Allport 1958; Pettigrew 1998) have shown that without contact between the members of a non-migrant majority and immigrant or ethnic minority populations it is impossible to build intergroup relationships and, thus, for minority/immigrant to integrate. Gaining skills and knowledge needed in the new environment (Tip et al., 2018) or the feeling of belonging (Shook and Clay 2012) are dependent on this integration and building relationships in the destination.

Secondly, research links immigrants' experiences of racial harassment and discrimination to reduced life satisfaction (Vohra and Adair 2000), poorer health (Safi 2010), and worse mental health, including higher levels of anxiety and stress (Nandi, Luthra, and Benzeval 2020). Hellgren (2018) shows, in a qualitative study exploring immigrants in Barcelona and Stockholm, that rejection perceived by racialized immigrants and minorities and the lack of interethnic contact is linked with reduced feelings of belonging and lower life satisfaction. Conversely, the perception of acceptance in the destination country's society is linked with higher immigrant well-being (Amit 2010). Thus for these two reasons, studying local ATI could potentially uncover how non-migrants' individual negative attitudes form barriers to integration and, through exposure, translate into experiences of discrimination, harassment and prejudice, and hence into immigrants' lower well-being.

#### 2.1 Hostile environment and life satisfaction

Veenhoven (1996) defines life satisfaction as 'the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In other words, how much the person likes the life he/she leads' (Veenhoven 1996: 17). I focus on the individually assessed general life satisfaction of immigrants. I operationalize life satisfaction as general and current. Thus, Veenhoven's (1996) definition of the concept ties closely to my operationalization and allows for a reasonable interpretation of my results.

Hostile environments and perceived discrimination relate to immigrants' well-being in varied ways. For example, Nandi, Luthra, and Benzeval (2020) show that harassment in the neighbourhood by locals adds to immigrants' stress and anxiety, whilst de Vroome and Hooghe (2013) found that discriminatory practices in the workplace force immigrants to faceless desirable living conditions. Kirmanoğlu and Başlevent (2013), in their European cross-country study, show variation in the effect of self-assessed discrimination on life satisfaction: the discrimination perception decreases life satisfaction for all but with a more significant effect for ethnic minorities. The comparable difference in life satisfaction based on ethnicity was also confirmed in Canada (Sapeha 2015), Israel (Amit 2010) and the UK (Knies, Nandi, and Platt 2016). Safi (2010), in another European study, first confirms higher life satisfaction for individuals belonging to the second generation and those with a longer stay in the destination country. However, these differences disappear when controlling for self-assessed discrimination. Ultimately, there is a great variation in the well-being of immigrants based on their individual characteristics. Research also demonstrates the variation in the effect of encounters with non-migrants on immigrants' experience depending, for example, on their ethnicity or country of origin (Davies et al., 2011; Knies, Nandi, and Platt 2016).

#### 2.2 Forms of exposure to non-migrant populations and their impact

This research examines the character of potential interactions between immigrants and non-migrants. Intergroup contact theory initially proposes that individuals hold negative attitudes towards others, leading to prejudice and hostility (Allport 1958). According to this theory, contact, if happening under specific circumstances such as having a common goal, equal status of groups, and institutional/authority support of the contact, can improve them. However, the application of the theory has evolved and is applied in research on different aspects of intergroup relations besides hostility.

A meta-analysis by Pettigrew and Tropp (2011) has shown that intergroup contact, even under less ideal conditions than those suggested by Allport, has a positive effect on intergroup relations. Which effect (positive or negative) dominates in the outcomes of intergroup relations depends on the type, nature, and ratio of positive and negative contacts individuals have (Pettigrew and Hewstone 2017). Mazziotta et al. (2015), therefore, argue that it is the character of the contact that is critical in the research of intergroup contact and its subsequent impact (whether on attitudes towards others or other aspects of life). They point out that, until recently, there has been a lack of research that distinguishes between the two characters and their different effects. Similarly, Pettigrew and

Hewstone (2017) suggest that it is essential to measure both types (positive and negative) of contact.

There is a substantial body of literature examining the effect of contact and exposure to non-migrants on different aspects of the life of minorities, including ethnic minorities (Knies, Nandi, and Platt 2016), immigrants (Sapeha 2015; Hellgren 2018), and refugees (Tip et al., 2018). However, the measurement of exposure is most often inferred from proxies, such as the share of foreign-born or migrant concentration (Sapeha 2015), diversity (Putnam 2007), neighbourhood diversity, or ethnic composition (Knies, Nandi, and Platt 2016). These studies successfully link immigrants' life satisfaction with intergroup contact or its lack and identify its importance in well-being research. However, although the variables in these studies can measure some association, they are beset by their inability to distinguish the complex character of exposure. For instance, as Sapeha (2015) concludes, in her research on Canadian immigrants, using immigrant concentration proxy shows an association with life satisfaction. Only the additional use of individual measures of intergroup friendship and support groups in her study uncovers why this association is of a particular type and direction. Proxy measures do not allow following the recommendation to distinguish the positive or negative contact/exposure.

Studies on the negative effect of perceived (Vohra and Adair 2000; Safi 2010) or experienced (Nandi, Luthra, and Benzeval 2020) discrimination is another research field linking exposure to non-migrants with immigrants' lower life satisfaction or well-being. Using measures of discrimination allows us to examine the negative context in the intergroup contact research, however, the scope is rather limited. The most often used measures of perceived discrimination do not distinguish the origin of the discrimination and thus cannot conclude if the source is the non-migrant population or sources like other immigrant groups or institutions. Research shows there are barriers preventing immigrants from recognizing, acknowledging, and reporting discrimination. Thus those individuals who do not express they perceive discrimination are not investigated in studies employing self-assessed discrimination measures (Hopkins et al., 2016). Lastly, while these measures are useful in assessing immigrants' health (Nandi, Luthra, and Benzeval 2020), linking perceived discrimination and lower life satisfaction (Vohra and Adair 2000; Safi 2010) brings endogeneity issues. These research designs employed in previous studies condition one self-assessed measure on another self-assessed measure: measures of perceived discrimination predict self-assessed life satisfaction.

In this article, I bring together the research on perceived discrimination and empirical research stemming from the Contact theory, which focuses on the character of interactions. I show there is a scope to introduce new complementary measures of the character of intergroup interactions—regional ATI. This measure captures the context of exposure more directly than proxies and for wider immigrant groups than perceived discrimination in order to understand the potential impact of the environment on immigrants' wellbeing. As regional ATI is aggregated from other sources and not self-assessed, the main association is not affected by endogeneity.

2.2.1 Attitudes towards immigrants as a measure of exposure to the destination country population. Research suggests that attitudes and behaviour are strongly correlated, and individuals tend to act following their beliefs (Schuman et al., 1985). Thus, if

ATI is negative and, at the same time, reflected in the actions of non-migrants, it will imply that immigrants repeatedly face hostility during everyday activities such as microaggressions, passing a racial slur graffitied on a wall, feeling mistrust from police officers, failing to find a job, or reading a racist op-ed in a newspaper.

Anti-immigrant attitudes do not always positively correlate with the foreign population rate (Hopkins et al., 2016). Some research, therefore, suggests that negative ATI simply predicts less intergroup interaction, however, while immigrants tend to select where to settle and avoid the most hostile areas, it is not always attainable for them, and they live in a range of different environments (Maggio 2021). Unlike non-migrants, who can avoid contact with immigrants, immigrants (except for specific isolated communities) are regularly exposed to the destination country's population. Therefore, while ATI is not a measure of contact, it can serve as a proxy of exposure to non-migrants with the added benefit of measuring its quality (positive–negative) when studied from the perspective of immigrants.

Commuting, shopping, visiting institutions, dealing with authorities, working, reading news, or being subject to the law could be means of immigrants' exposure to non-migrants and their attitudes and behaviour. Direct contact is only one of the ways through which immigrants might be exposed to non-migrants, and focusing solely on contact ignores these other potential channels of experiencing hostility (or hospitality). Thus, existing research using direct contact measures might be telling an incomplete story about the effect of exposure. ATI refrains from assuming means of exposure and reports only the destination population's perception of immigrants and therefore captures the nature of exposure immigrants experience from a novel perspective. Research using ATI as an explanatory variable can thus contribute to a more comprehensive picture of the effect of exposure.

Despite our comprehensive understanding of ATI from the perspective of non-migrants (Meuleman, Davidov, and Billiet 2009), there is a lack of research centred on the experience of immigrants when researching attitudes towards others (Tip et al., 2018), such as how they affect these communities. To my knowledge, only two studies have looked at the effect of the non-migrant population's ATI on immigrants' life satisfaction (Heizmann and Böhnke 2018; Kogan, Shen, and Siegert 2018).

In their cross-country research, Heizmann and Böhnke (2018) use ATI aggregated at the country level to represent symbolic boundaries. The ATI is used as a proxy to map whether immigrants are perceived negatively across Europe. Their results show an association with life satisfaction, although only for non-EU immigrants. In another crossnational study, Kogan, Shen, and Siegert (2018), using national ATI, show that immigrants are more satisfied in more welcoming countries. While these two studies confirm the link between national ATI and immigrants' well-being, they do not aim to explore the variation of ATI within countries or the association between ATI and well-being.

However, the differences in life satisfaction show the need to look into the variation in this association by their individual characteristics. ATI and immigrants' experience of contact/exposure with non-migrants could be affected by immigrants being (un)accustomed to hostility, immigrant generation, immigrants' ability to pass as non-migrants, and other characteristics. Thus it is still unclear if ATI in a particular country is

experienced equally by all immigrants living there. Moreover, the regional variation in the ATI makes an argument to explore this association on the subnational level.

Considering how well-explored attitudes are, their potential to inform policies is not fully utilized. Exploring which regions in countries are more anti-migrant, which immigrant groups are exceedingly affected by negative ATI, and what individual or contextual factors impact this association could, with the current knowledge of the ATI, inform policy-makers in greater detail.

#### 2.3 Research design and hypotheses

To answer my research question 'Are more positive ATI in regions where immigrants live associated with their higher life satisfaction?', the key part of my research design is the aggregation of ATI at the sub-national regional level. It controls the heterogeneity in each country whilst also matching immigrants to the most probable levels of attitudes they experience. Research on ATI determinants indicates that factors such as unemployment and foreign population rate play a role in the non-migrants' ATI (Rustenbach 2010). Therefore, it is important to distinguish also the variation of these determinants within a country. It is necessary to acknowledge there is a degree of self-selection of both immigrants and non-migrants into regions of residence based on their attitudes towards the other group or local ATI (Putnam 2007). Nevertheless, there still is a great variation in the ATI in the regions of immigrants' residences, and thus immigrants face different types of lived environments, which is the focus of this study. This means that despite some self-selection, my research improves our understanding of how the environment relates to immigrants' subjective well-being.

While moving to a smaller geographical level, such as neighbourhoods, would have some analytical advantages, subnational regions bring information about a broader area in which individuals spend time beyond the place of their residence. Moreover, the availability of comparable national data would be limited using smaller regions. The use of regional-level variables allows the comparison of most European countries, and a cross-country design makes it possible to compare intra- and international differences in the association. This broadens the research, which is currently limited to studies considering small samples or specific immigrant groups and geographical locations (Verkuyten 2008; Hellgren 2018; Tip et al., 2018).

Immigrants differ in well-documented aspects that affect life satisfaction and attitudes towards them. Taking account of this heterogeneity is important because the actual association between ATI and life satisfaction may be otherwise disguised in analysis, which assumes constant effects. Therefore, except for controlling for socio-economic and demographic characteristics, I draw on the literature to select the factors differentiating immigrants. Following up on my research question, I expect that the strength of the association between ATI and life satisfaction varies depending on migrant characteristics and I test three hypotheses. Specifically, (H1) I expect the second generation and those with (H2) a longer tenure in the destination to be less affected by anti-immigrant attitudes as they are more embedded in the culture (Arpino and de Valk 2018). However, the effect might persist for some ethnic groups that experience more discrimination (Cheung 2013) or those with both parents born abroad (Safi 2010). There are two theoretical explanations for the

length of stay affecting the association. While satisfaction with the economic situation tends to rise with the years for immigrants (Bartram 2011), long stays in the destination country also come with regret, (un)fulfilled expectations, and comparisons with their home country, which might, conversely, lead to lower life satisfaction (Bartram 2015; Kóczán 2016). Similarly can lead to a lower life satisfaction change in the individual's (mental) health during their life and tenure in the destination. However, the new life-course approach in the research on immigrants' health shows these changes to be linked to the different health statuses of cohorts rather than changes in time (Brunori 2022).

Finally, I hypothesize (H3) that perceived discrimination interacts with the association of interest. There are, again, two theoretical explanations of this interaction. First, based on ethnicity, sending country (Nandi, Luthra, and Benzeval 2020), skin colour, religion, language, and nationality (Heizmann and Böhnke 2018), immigrants might differ in their visibility and thus stigmatization. These individuals may be more perceptive to the environmental hostility or feel it is directed specifically at them. This suggests life satisfaction of individuals who perceive discrimination is more sensitive to ATI. Conversely, those who do not identify as discriminated against may be unaffected by ATI.

The second perspective stems from empirical research showing ATI and perceived discrimination have different spatial distributions in a population (Hopkins et al., 2016). This suggests they are independent, and individuals might be affected by ATI despite the fact they do not perceive/disclose to perceive discrimination. The variable belonging to a group discriminated against is therefore not only a key control, but I also use it to draw a comparison between the frequently used research design using self-assessed/perceived discrimination as the main explanatory variable and my research design.

I add to existing research by providing a more precise description of the role of positive/negative exposure on immigrants' life satisfaction and explicitly addressing whether this association differs according to migrant characteristics. By studying the association of the regional level between the non-migrants' *ATI* and immigrants' life satisfaction, I can first explore the understudied nature of exposure and the within-country variation in the association established by Kogan, Shen, and Siegert (2018). This approach contextualizes discrimination occurring in a hostile environment. Secondly, identifying the sources of heterogeneity by individual characteristics advances our understanding of this association from simply confirming its existence to identifying potentially unequal effects of the lived environment on different immigrants. Third, employing ATI prevents endogeneity issues (between self-assessed discrimination and subjective well-being) and identifies the source of discrimination by only including non-migrants ATI. I introduce ATI as a new complementary tool for empirical research of immigrants' outcomes in their destination. Finally, my results can better inform integration policies thanks to a broad knowledge of ATI.

# 3. Data and methods

# 3.1 Data and sample description

I use the ESS, a cross-sectional survey conducted biennially since 2002 across most European countries (European Social Survey 2018). I pool five rounds of the ESS datasets

(cf. André and Dronkers 2016) from the fifth to ninth rounds (collected between 2010 and 2018).<sup>2</sup> I restrict my sample to the twenty-two European countries that participated in at least three of those waves: Austria, Belgium, Bulgaria, Czechia, Denmark, Estonia, France, Finland, Germany, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, and the UK. This provides me with a sufficient analytical sample and ensures I capture variation within the regions in each country. My main analytical sample comprises 27,795 individuals of migrant origin. They are split into 14,654 individuals (52.7%) born outside their country of residence (immigrants) and 13,141 individuals (47.3%) born in their country of residency but with at least one *parent* born outside of that country (the second generation). I estimate my main model using both generations but split the sample to consider immigrant-specific measures (length of stay) and to assess whether the variation in consequences of attitudes between groups is in line with my theoretical expectations. Those who could not be clearly identified as of immigrant origin or not are not considered further (N=1,652).

I employ a second sample (N=166,205) comprising survey participants born in their country of residence with both parents born in the same country ('non-migrants') to construct my main independent variable: (non-migrants') ATI. See Appendix 1 for details.

Although ESS is not explicitly designed for migration research, it is extensively used for this purpose (Bălţătescu 2007; Safi 2010; Kirmanoğlu and Başlevent 2013; Kogan, Shen, and Siegert 2018). The advantages of ESS data for my analysis include the wide sample of participating countries, access to variables of interest, and the ability to identify immigrant groups in terms of ethnicity, language, country of origin, length of stay, and migrant generation. The limitation of ESS is that it is translated only into languages used as a first language by more than 5 per cent of the population of any given country. However, immigrants can complete the survey in any language they speak (e.g., the main language spoken in the destination, the minority language spoken in the destination); it does not have to be their mother tongue. Thus, immigrants speaking any language spoken in the destination country are included in the sampling. This partially discriminates those living in the country for a shorter period of time and with a weaker grasp of the language. The survey also does not reach certain populations, such as irregular immigrants (Bălţătescu 2007). Considering the other challenges this population faces, I do not aim to generalize my findings to those individuals but focus on the same migrant populations as authors of existing studies.

Furthermore, ESS provides markers of sub-national regions in which the data are collected—Nomenclature of Territorial Units Statistics (NUTS). These units are a standardized geocoding system used to recognize subdivisions of states in Europe for statistical purposes. The average observation count per unit in the ESS is 450.

## 3.2 Dependent variable—life satisfaction

The response variable in this study is individuals' life satisfaction. The survey question is worded as follows:

All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means extremely dissatisfied and 10 means extremely satisfied.<sup>3</sup>

This measure is well-established across different countries and cultures and has been extensively studied. I follow previous cross-cultural comparisons of subjective well-being (van Praag et al., 2003; Bălţătescu 2007), including research using ESS data (Safi 2010; Kirmanoğlu and Başlevent 2013; Kogan, Shen, and Siegert 2018) and research studies focusing on examining possible uses of the ESS for cross-cultural research (Meuleman and Billiet 2012; Davidov and Semyonov 2017).

There is a concern about the comparability of happiness and life satisfaction in a cross-country and cross-cultural environment in life satisfaction research. This concern derives from the view that there is a variation in the meaning of happiness and satisfaction across people, which could be magnified by culture. The most often cited reasons for cultural differences are (1) differences in definitions of the words 'happiness' and 'satisfaction', (2) societal desirability affecting individual's responses according to cultural norms, and (3) differences in approaching the concept of happiness in non-Western countries, which are less familiar with it (Veenhoven 1996). Veenhoven (2000) explains that all hypotheses confronting cross-cultural comparisons of life satisfaction have been tested and subsequently failed.

The studies show that differences in reported life satisfaction are correlated with country characteristics (Veenhoven 2000). Moreover, the set of characteristics with which life satisfaction is correlated are similar and comparable across countries and always related to the same social and economic factors (Diener et al., 1995; Veenhoven 2012). In summary, despite the possibility that life satisfaction measures, to a degree, measure different concepts, both theoretical and empirical studies agree these measures are comparable across cultures. Moreover, I control for the country of origin and destination in my models.

## 3.3 Key explanatory variable—attitudes towards immigrants

To construct the measure of ATI, I use the non-migrant sample described above, aggregate the data to the regional level, and build an index by combining six measures (Table 1). The correlation matrix shows a medium to high positive correlation among the indicators (0.42–0.78). The exploratory factor analysis distinguished two different dimensions in the measures. The first dimension, which includes questions a-c, describes attitudes regarding whether to *allow* new immigrants into a country. The second dimension measures the attitudes regarding the *benefits* of immigration for the country: d-f. This division agrees with stronger correlation ties among the two sets of variables. However, the eigenvalue suggests that one factor is enough to explain the variance in the variables (Appendix 3).

Meuleman and Billiet (2012) analysed the cross-cultural validity of ESS migration scales and showed a high level of cross-country comparability using the index of the *allow* measures. Since my research design is cross-country, and my analysis indicates a single index approach (Cronbach's  $\alpha = 0.945$ ), I retained the single index. I summed the values for the six measures, with the answers to the statements d–f rescaled to a 4-point scale, and took the average. This gives me a continuous scale between one and four. The mean of the summed index is 2.78 for the pooled sample, and they are stable in time (Appendix 3). I aggregate ATI to NUTS1, NUTS2, or NUTS3 level

Table 1. The six ATI measures in the ESS.

	Measure	Scale	Note
A	'To what extent do you think [country] should allow people of the same race or ethnic group as most [country] 's people to come and live here?'	4-point scale (allow many to come and live here, allow some, allow few, allow none)	Reverse coded
В	'How about people of a different race or ethnic group from most [country] people?'	4-point scale	Reverse coded
С	'And how about people from the poorer countries outside Europe?'	4-point scale	Reverse coded
D	'Would you say that [country] 's cultural life is generally undermined or enriched by people coming to live here from other countries?'	11-point scale	Recoded to a 4-point scale
E	'Would you say it is generally bad or good for [country] 's economy that people come to live here from other countries?'	11-point scale	Recoded to a 4-point scale
F	'Is [country] made a worse or a better place to live by people coming to live here from other countries?'	11-point scale	Recoded to a 4-point scale

classification depending on the smallest available level for each country, resulting in 194 regional measures of ATI (see Fig. 1). Table 2 and Appendix 2 present descriptive information for all variables.

#### 3.4 Control variables

I include potential confounders to better isolate the association between regional ATI and individuals' well-being. I employ the immigrant generation and the belonging to a discriminated group for the full sample and the length of stay for the first generation only to test my hypotheses. As control variables, I account for age, gender, highest attained educational level, labour market status, and social activities, which are consistently linked with

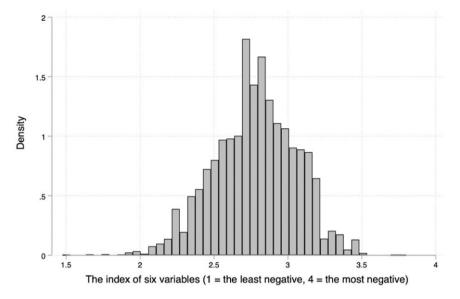


Figure 1. Distribution of regions on the attitudes scale.

life satisfaction (Diener et al., 1999; Dolan, Peasgood, and White 2008; Arpino and de Valk 2018). On the contextual level, I consider regional unemployment and foreign population rates, which could affect intergroup relations (Laurence 2009). They are also related to the life satisfaction of individuals and ATI (Dolan, Peasgood, and White 2008; Billiet, Meuleman, and De Witte 2014). Especially the foreign population rate, as a proxy of intergroup contact (cf. Rustenbach 2010), is a potential determinant of ATI as proposed by the intergroup theory and thus might confound the association. The regional unemployment rate also serves as a proxy of area deprivation. I control for them intending to bring robust results and be able to investigate the association further.

Lastly, I control for the destination country, ESS round (year), and the country, or for smaller countries, world region of origin<sup>5</sup> using fixed effects. The approach to the appraisal of one's life is learned during socialization and thus influenced by both, the country of origin and destination, although immigrants' life satisfaction is often closer to the destination's average than the origin's average (Veenhoven 2012). As life satisfaction is also associated with contextual factors that are otherwise not controlled for in the model and might change over time, such as a country's economic situation, I add a fixed effect for the year to account for this.

The first generation's initial number of countries of origin was 191, and for the parents, it was 195 (mothers) and 189 (fathers). Among these, I identified multiple countries with insufficient observations to incorporate them individually in the analysis. I grouped them into regions based on geographical and cultural closeness and average reported life satisfaction (Helliwell, Layard, and Sachs 2019). For a country to be included separately, the flow of emigrants from that country has to be more than 100, and at least 70 per cent of them had to choose the same destination country.

Table 2. The response variable, individual level independent variables, and controls.

Variable	Measure	N	%
Migrant generation	First generation	14,849	52.73
	Second generation	13,315	47.27
Time since arrival	0–5 years	2,034	13.70
in the country			
	6–19 years	5,206	35.06
	20+ years	7,610	51.25
Belonging to a dis-	Belonging	3,316	11.77
criminated group			
	Not belonging	24,848	88.23
Paid activity in the	Employed	15,402	54.69
last 7 days			
	Not employed	12,762	45.31
Gender	Male	13,094	46.49
	Female	15,070	53.51
Education	Primary	7,134	25.33
	Secondary	9,658	34.29
	Vocational	4,294	15.25
	Tertiary	7,078	25.13
Social activities	Never	456	1.62
	Rarely	5,282	18.77
	Often	10,615	37.69
	Every day	11,806	41.92
Variable	Measure	Mean	SD
Life satisfaction	11-point scale	7.03	0.013
Attitudes	4-point scale	2.78	0.27
Age	Continuous (years)	45.7	0.1
Age <sup>2</sup>	Continuous (years	2,403	10.3
	squared)		
Health	5-point scale	3.81	0.92

Given the considerable variation in countries of origin, using the world regions of origin narrows the number of categories for the fixed effect variable. It solves the problem of small country sample sizes (Safi 2010). The redefined areas comprise thirty-seven countries and seventeen world regions (Appendix 2).

#### 3.5 Estimation methods

I estimate a series of nested linear regression models with fixed effects controlling for country and year effects. Fixed effects are preferred to a random intercept approach in this model for two reasons. First, methodologically, the number of destination countries is insufficient to employ a random intercept model with confidence (Bryan and Jenkins 2016) as is insufficient the sample size would not allow enough observations per each country of origin group in a multi-level model (see Appendix 2 for discussion).

Secondly, theoretically, my focus is on individuals in particular countries, and I do not aspire to generalize the inference beyond the migrant population of the individual countries included in the analysis. Thus, I do not assume these countries are a representative set of countries from a bigger sample, which is the multi-level model assumption. Considering insignificant changes in regional values of the explanatory variable in time, I do not aim to interpret the region—year findings, thus, do not need to cluster data in this way.

All analyses are adjusted using post-stratification weights designed by ESS. The post-stratification weights use auxiliary information to reduce the potential non-response bias and sampling error. I adjusted my estimates to account for the survey design using the svyset command in Stata. I cluster standard errors at the regional level (Moulton 1990). However, I also run robustness tests using cluster–robust standard errors to exclude the possibility of cluster correlation (and/or heteroskedasticity), as suggested by Cameron and Miller (2015).

# 4. Results

# 4.1 Regional attitudes towards immigrants and immigrants' well-being

The descriptive analysis of the life satisfaction of immigrants and non-migrants shows significant differences across regions (Appendix 4). These differences suggest that the life satisfaction of immigrants is correlated with regional characteristics differently than the life satisfaction of non-migrants. This confirms the importance of looking at the association beyond the national level and not treating the nation-state as a homogeneous unit, as that can obscure the findings.

Table 3 shows the full sample analysis results testing the association between regional ATI and life satisfaction while including controls. The estimation provides clear evidence of an association. It is statistically and substantively significant. As the main estimate of interest indicates, immigrant life satisfaction decreases by  $0.20\ (P < .001)$  points with each increasing point of negative attitudes. This means that the potential effect of moving one point in the distribution of ATI on life satisfaction is higher than attaining vocational education compared to elementary education.

All the control variables in the model, which are significantly associated with life satisfaction, are oriented as expected. An individual with a job, higher education, good health, and social contacts tends to report higher life satisfaction (Diener et al., 1999). In contrast, those who self-identify with a discriminated group tend to assess their levels of life satisfaction as lower (Kirmanoğlu and Başlevent 2013). Compared to the model without covariates, the results indicate that the association between attitudes and subjective life

**Table 3.** Estimates from fixed effect OLS regression model with life satisfaction as the response variable.

	Life satisfaction
Negative attitudes	-0.201
	(0.072)**
The second generation	0.172
	(1.302)
Male	-0.101
	(0.023)**
Age	-0.058
	(0.004)**
Age <sup>2</sup>	0.001
	(0.000)**
Health	0.679
	(0.019)**
Discrimination	-0.554
	(0.037)**
Secondary education	0.031
	(0.035)
Vocational education	0.130
	(0.047)**
Tertiary education	0.310
	(0.033)**
Meeting socially	0.315
	(0.018)**
Paid work	0.304
	(0.025)**
Unemployment rate	-0.040
	(0.005)**
Foreign population rate	-0.002
	(0.002)
$R^2$	0.22
N	28,146

 $<sup>^{+}</sup>P$  < .1.

Notes: The fixed effect controls (countries of origin and destination, year) are included in the model but not shown.

 $<sup>^*</sup>P < .05.$ 

<sup>\*\*</sup>P < .01.

satisfaction is robust to adding all control variables. The exclusion of regional controls or the indicator of belonging to a discriminated group does not significantly change estimates of the association between ATI and well-being (significant on the level between P < .01 and P < .1 depending on the model specification, see full models in Appendix 5).

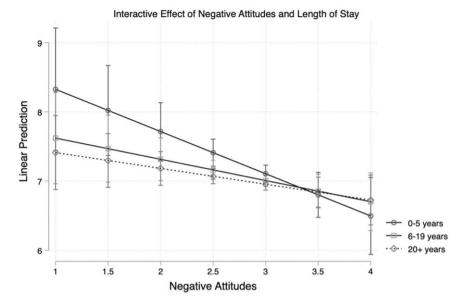
# 4.2 Variation in the association by generation, length of stay, and perceived discrimination

The difference between generations is not significant whether it is measured as the main effect or an interaction (Appendix 5). The value of life satisfaction is higher for the second generation, with high variation. The variation is in line with the previous research, which shows that the life satisfaction of the second generation is predicted by the origin of parents and discrimination faced by individuals (Safi 2010; Cheung 2013). Being born in a country might not translate into protection against hostility and its consequences for all. This suggests a potential long-lasting negative effect of ATI on some immigrant groups—all members of those families, despite some of them being born in the country, might experience an association between hostility towards immigrants and their life satisfaction.

I estimate a model for the first generation and explore the interactive effect estimates of the length of stay on the association. The main estimates (Appendix 6) show heterogeneity in the association. The length of stay in the country is associated with immigrants' levels of life satisfaction (P < .05). Those staying in the country the longest assess their well-being as worse than the other two groups, which aligns with existing research (Safi 2010; Kóczán 2016) and supports the theoretical argument of unfulfilled expectations (Obućina 2012).

This heterogeneity is further confirmed by the estimates from a model with interaction (Fig. 2, Appendix 5). The association between ATI and life satisfaction is much greater for those who recently arrived and significantly differs (P<.05) compared to the group staying in the destination for twenty or more years. Their life satisfaction is the least sensitive to regional hostility, but they have a low level of LS regardless. Individuals who have been in the destination countries for 0–5 years tend to self-report higher well-being in the regions with less negative attitudes and vice versa. Individuals coming to a destination country with certain expectations might be more affected by experienced hostility. Immigrants living in the destination country for a longer time tend to assess their life satisfaction in comparison to the population of a destination country rather than stayers in their home countries, which is the case for recent immigrants (Bartram 2013). This, combined with familiarity with the environment and a longer time of exposure to it, might result in the assessment of their own life that is less susceptible to the environment as they are acclimatized to it.

Finally, I show that self-assessed discrimination is significantly associated with the lower life satisfaction of individuals across all models, as expected (Vohra and Adair 2000; Safi 2010). Figure 3 (the full model in Appendix 5) presents estimates of interactive effect and the lack of a statistically significant interaction there is of interest. There is no significant difference in the association between regional hostility and an individual's well-being according to their sense of whether they belong to a discriminated group. This is an important observation considering the wide use of self-assessed discrimination as an

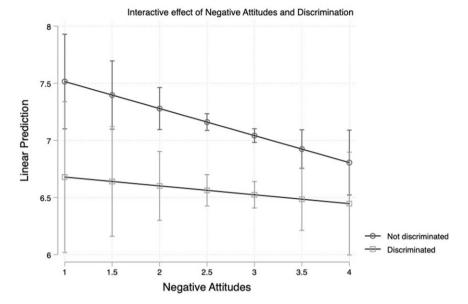


**Figure 2.** The interacted effect of negative attitudes and the length of stay in the destination country for the first generation.

Notes: Estimates from fixed effect OLS regression model with an interaction effect. Life satisfaction is measured on a scale from 0 (completely unsatisfied) to 11 (completely satisfied). Y-axis shows 6-9 for a more detailed view. N=14.654.

explanatory factor of well-being. My results suggest both immigrants who do not see themselves as belonging to a discriminated group (or do not report this in a survey) and those who do (or report) are affected by hostility and assess their respective levels of life satisfaction as lower in regions with a higher level of negative attitudes. The lack of interaction between the ATI and self-assessed discrimination aligns with Hopkins et al. (2016) analysis of spatial patterns of anti-immigrant attitudes and perceived discrimination which shows they do not correlate as well as other empirical research suggesting the perception of hostility varies across different migrant groups (Maggio 2021).

These results, along with the estimates from the model excluding the indicator belonging to a discriminated group (Appendix 5), show that belonging to a discriminated group and being exposed to negative attitudes are not interchangeable measures. This might be unaccounted for in research models relying on self-assessed measures of discrimination and lacking an exogenous measure of hostility. Some individuals might not be able to perceive the discrimination or express they experience it, but my results show it still links to their experience. Therefore, there might be whole migrant groups whose life satisfaction and experience with discrimination are not observed in these studies. For instance, this might explain the insignificant difference in the well-being of the first and second generation of immigrants when associated with the ATI. My expectation to see a difference in estimates was based on studies employing the variable self-assessed feeling of



**Figure 3.** Interacted effect of negative attitudes and self-assessed discrimination on the life satisfaction of immigrants.

Notes: Estimates from fixed effect OLS regression model. Life satisfaction is measured on a scale from 0 (completely unsatisfied) to 11 (completely satisfied). Y-axis shows 6–8 for a more detailed view. N = 27,795.

discrimination. These results support the notion that ATI as an explanatory variable can be a valuable complementary tool contributing to the more comprehensive understanding of variation in immigrants' life satisfaction.

#### 4.3 Robustness checks

The OLS models employing life satisfaction measures as the response variable face the problem of cardinal assumption (Jenkins 2020), as it assumes the life satisfaction measure is a cardinal scale. Considering the values on the scale are not necessarily equally understood by all respondents (e.g., compared to weight or income), this assumption is problematic, especially in the cross-cultural interpretation of measures of subjective well-being. Therefore, to check the internal validity of my analysis, I estimate two models. Following the discussion on scales in literature, I examine whether changing the life satisfaction scale yields results that would suggest different interpretations of the association. I estimate an additional OLS model with a rescaled life satisfaction (seven-point scale) and an ordinal regression model treating the life satisfaction measure as an ordinal variable (seven categories). I compare the estimates with the main OLS model (Stevenson and Wolfers 2008). In accordance with previous results, estimates of these two models confirm a significant association between regional attitudes and individual well-being (P < .05, full results Appendix 7).

To ensure the robustness of results, I enrich the main model with additional controls that are traditionally applied as explanatory variables of well-being but are not linked to the discrimination: marital status (single, married, divorced, and widowed), having a child (binary), relative income of the household (country income decile) and individual occupation. The ATI remains significantly negatively associated with well-being (P < .05), which decreases by 0.36 points with each point of ATI in the regions with more negative attitudes (Appendix 7, Model A).

The main model shows great variation based on the country of origin. In the variation of the full model, I replaced the fixed effect of origin with the country of origin's average life satisfaction (scale) to control the cultural conditionality in assessing one's life satisfaction. This model yields results comparable to the main model (Appendix 7).

Lastly, I run models using cluster–robust standard errors to exclude the possibility of cluster correlation (and/or heteroskedasticity). These models estimate the same results as the main models. The consistent findings in these additional models support my conclusion that the life satisfaction of immigrants and the second generation is associated with regional hostility.

# 5. Discussion and conclusion

I set out to understand the variation in ATI on the subnational level and to ascertain how they are related to the life satisfaction of different groups of immigrants. It is important to understand the relationship between the environment and immigrants' well-being, as well as what contributes to said well-being and how. Answering my research question, my article highlights the association between more positive regional ATI and higher reported immigrants' life satisfaction and the potential for ATI to contribute to explaining the variation in life satisfaction of some migrant groups. Notably, this association is robust to the inclusion of a wide range of potential confounders and measures and is stable if examined using different statistical tools.

This article's contribution to knowledge is both substantive and methodological, and it suggests possible directions for follow-up. The substantive results are 2-fold. First, my research design puts the association of interest into an innovative cross-regional comparative perspective and sheds light on different environments experienced by immigrants within a single country, thus advancing previous studies focusing on the national level (Heizmann and Böhnke 2018; Kogan, Shen, and Siegert 2018). Controlling for the regional deprivation and immigrant concentration, immigrants in regions with anti-immigrant attitudes consistently report lower life satisfaction compared to immigrants in the same country who live in areas with less negative ATI. Second, using multiple differentiating characteristics of individuals to acknowledge the heterogeneity of immigrants, these results address the unexplained variance in the well-being of particular immigrants.

Testing my hypothesis 1 and considering differences between immigrants and the second generation, the association is similar for both groups, even if the levels of their life satisfaction differ. This result does not confirm my hypothesis of a weaker association for second-generation immigrants; however, it supports previous research showing that more

than the difference between the generations, there is a variation in life satisfaction of second-generation immigrants of varying origins (Safi 2010).

I confirm my hypothesis 2 of a weaker association for immigrants with a longer tenure, and show that they, although reporting lower life satisfaction, are less affected by regional negative ATI. This implies that those staying longer in destinations are more accustomed to the negative environment that they are exposed to or, potentially, that there is a compositional effect of cohorts at play. It would be valuable to examine further how different environments—different compositions of foreign-born populations and different levels of hostility—affect individuals according to the years lived in the destination country using longitudinal analysis. Such results could have major implications for integration and settlement policies if we better understand the relationship between the length of stay, the sensitivity of immigrants' well-being to a hostile environment, and the cause of lower well-being of long-stayers.

Finally, testing my hypothesis 3, my results do not confirm it and show this association is not affected by individuals' assessment of their group being victims of discrimination (which itself is associated with LS). These findings lead to an important implication for future research using self-assessed discrimination as an explanatory tool. The fact that there is a discrepancy between results using endogenous and exogenous measures of discrimination suggests these measures are not interchangeable but rather complementary and measure different intergroup experiences (Vohra and Adair 2000; Amit 2010; Kirmanoğlu and Başlevent 2013). This finding should make us revisit previous findings and further explore whether there are groups of immigrants who do not belong to/identify as discriminated groups (or cannot assess their experience as discriminatory) but are still negatively affected by hostility. An alternative interpretation might be that immigrants report lower well-being in a hostile environment, even if this hostility is targeting other immigrants. This implies the existence of intergroup solidarity and further research should reckon with these potential interpretations.

From the perspective of methodological contribution, my results show that using the measure of attitudes gathered from the non-migrant population partially tackles the endogeneity of previously used self-assessed discrimination as explanatory variables in immigrants' well-being research and additionally explains variation in well-being for groups not accounted for yet. Moreover, despite using the OLS regression modelling, thanks to using an exogenous explanatory variable (as opposed to self-assessed one) of subjective well-being, the risk of measuring a reverse causality between the regional attitudes towards immigrants and immigrants' well-being is minimal. This study builds on the research on ATI and explores the potential use of ATI as an explanatory variable in research centred on immigrants.

The main limitation of this study is the size of my sample for individual origin countries. It may limit the analysis and the interpretation, for instance, in analysing immigrant subpopulations and the compositional effects in variation. The size of the sample is a reoccurring problem in migration research. In this article, I mitigate this challenge by combining separate rounds of ESS data to improve the sample size. However, this affects the generalizability of the results to immigrant populations other than those represented in the ESS. Another limitation is the possible residential self-selection of immigrants, which is driven, for instance, by immigrants' income, origin, or regional characteristics.

Considering the robustness of the results to the inclusion of different controls, including determinants of the residential self-selection, my model, to a degree, controls for that. However, I cannot entirely exclude the possibility of some effect. While this research design does not allow us to draw causal inferences, my study puts forward new information regarding the variation in immigrant well-being and provides a new detailed account of what is happening in particular social settings where immigrants live.

Nonetheless, this article broadens the literature on immigrants' well-being and its relationship to their lived environment. The use of ATI as an explanatory variable for their well-being tackles previous methodological issues in this area of research relating to the use of self-assessing measures and proxies. Combining the new measure of lived context with immigrants' own characteristics, I am able to describe how the hostility of non-migrants' links to immigrants' well-being and contributes to explaining variations in immigrants' well-being. Further, the robustness of the results provides a clear indication *that regional attitudes matter for immigrants*, even in the presence of other factors known to impact immigrants' well-being. Therefore, this work is an important contribution to the continued effort to improve the literature and policy relating to immigrants' well-being and their integration.

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# Declaration of interest statement

The author reports there are no competing interests to declare.

#### Notes

- 1. While being aware of the nuances between the terms (*subjective*) wellbeing and life satisfaction and the discussion of these terms in the literature, for the purpose of this research, I am using them interchangeably.
- Considering the first round of the ESS data collection employs different attitudes towards immigrants measures and the second and third rounds do not collect data for a considerable share of countries, I decided to pool data for the last decade (as available at the time the analysis was conducted), which also makes the analysis more timely.

- 3. ESS questionnaire also records the spontaneous answer 'I don't know'.
- 4. The EU-SILC dataset on the Material and Social deprivation by NUTS region (dataset ilc\_mdsd08) would be a more precise measure; however, the Eurostat only provides harmonized data since 2014.
- 5. The term 'world region of origin' as a grouping of sending countries with the same cultural background and a similar level of life satisfaction, is not to be confused with the subnational regions of EU countries where I aggregate ATI. For this reason, I further use only the term country of origin even when speaking about the world regions of origin.
- 6. The last two variables yield too many missing values to include them in the main model. The portion of missing values is approximately 20 per cent for the relative income and 19% for the occupation classification. The values are not missing at random. T-tests show significant differences between groups of individuals answering these two questions and those who did not.

# References

- Allport, G. W. (1958) The Nature of Prejudice. Garden City, NY: Doubleday Anchor Books.
  Amit, K. (2010) 'Determinants of Life Satisfaction Among Immigrants from Western Countries and from the FSU in Israel', Social Indicators Research, 96: 515–34.
- André, S., and Dronkers, J. (2016) 'Perceived in-Group Discrimination by First and Second Generation Immigrants from Different Countries of Origin in 27 EU Member-States', *International Sociology*, 32: 105–29.
- Arpino, B., and de Valk, H. (2018) 'Comparing Life Satisfaction of Immigrants and Natives Across Europe: The Role of Social Contacts', *Social Indicators Research*, 137: 1163–84.
- Bălțătescu, S. (2007) 'Central and Eastern Europeans Migrants' Subjective Quality of Life. A Comparative Study', *Journal of Identity and Migration Studies*, 1: 14.
- Bartram, D. (2011) 'Economic Migration and Happiness: Comparing Immigrants' and Natives' Happiness Gains From Income', *Social Indicators Research*, 103: 57–76.
- —— (2013) 'Happiness and 'Economic Migration': A Comparison of Eastern European Migrants and Stayers', *Migration Studies*, 1: 156–75.
- —— (2015) 'Migration and Quality of Life in the Global Context', *Global Handbook of Quality of Life*, pp. 491–503. Dordrecht, Netherlands: Springer Netherlands.
- Baykara-Krumme, H., and Platt, L. (2018) 'Life Satisfaction of Migrants, Stayers and Returnees: reaping the Fruits of Migration in Old Age', *Ageing and Society*, 38: 721–45.
- Billiet, J., Meuleman, B. and De Witte, H. (2014) 'The Relationship between Ethnic Threat and Economic Insecurity in Times of Economic Crisis: Analysis of European Social Survey Data', *Migration Studies*, 2: 135–61.
- Brunori, C. (2022) *An Immigrants' Paradox in Mental Health? A Life-course Perspective*. Atlanta, Georgia: Population Association of America.
- Bryan, M. L., and Jenkins, S. P. (2016) 'Multilevel Modelling of Country Effects: A Cautionary Tale', *European Sociological Review*, 32: 3–22.
- Cameron, C. A., and Miller, D. L. (2015) 'A Practitioner's Guide to Cluster-Robust Inference', *Journal of Human Resources*, 50: 317–72.

- Cheung, S. Y. (2013) 'Ethno-Religious Minorities and Labour Market Integration: generational Advancement or Decline?', *Ethnic and Racial Studies*, 37: 140–60.
- Davidov, E., and Semyonov, M. (2017) 'Attitudes toward Immigrants in European Societies', *International Journal of Comparative Sociology*, 58: 359–66.
- Davies, R., et al. (2011) 'Quality of Life in Ethnically Diverse Neighbourhoods', *European Quality of Life Survey* (European Foundation for the Improvement of Living and Working Conditions). Dublin, Ireland.
- de Vroome, T., and Hooghe, M. (2013) 'Life Satisfaction among Ethnic Minorities in The Netherlands: Immigration Experience or Adverse Living Conditions', *Journal of Happiness Studies. Stud.*, 15: 1389–406.
- Diener, M. et al. (1995) 'Factors Predicting the Subjective Well-Being of Nations', *Journal of Personality and Social Psychology*, 69: 851–64.
- Diener, E. et al. (1999) 'Subjective Well-Being: Three Decades of Progress', *Psychological Bulletin*, 125: 276–302.
- Dolan, P., Peasgood, T., and White, M. (2008) 'Do We Really Know What Makes Us Happy? A Review of the Economic Literature on the Factors Associated with Subjective Well-Being', *Journal of Economic Psychology*, 29: 94–122.
- European Social Survey. (2018) In ERIC (ed.) *European Social Survey Cumulative File, ESS 1–9*, Norway: Norwegian Centre for Research Data—data Archive and distributor of ESS data for ESS ERIC.
- Heizmann, B., and Böhnke, P. (2018) 'Immigrant Life Satisfaction in Europe: The Role of Social and Symbolic Boundaries', *Journal of Ethnic and Migration Studies*, 45: 1027–50.
- Hellgren, Z. (2018) 'Class, Race—and Place: Immigrants' Self-Perceptions on Inclusion, Belonging and Opportunities in Stockholm and Barcelona', *Ethnic and Racial Studies*, 42: 2084–102.
- Helliwell, J. F., Layard, R., and Sachs, J. D. (2019) 'World Happiness Report 2019', New York: Sustainable Development Solutions Network.
- Hendriks, M., and Bartram, D. (2019) 'Bringing Happiness Into the Study of Migration and Its Consequences: What, Why, and How', *Journal of Immigrant & Refugee Studies*, 17: 279–98.
- Hopkins, D. J. et al. (2016) 'Out of Context: The Absence of Geographic Variation in US Immigrants' Perceptions of Discrimination', *Politics, Groups, and Identities*, 4: 363–92.
- Jenkins, S. P. (2020) 'Better off? Distributional Comparisons for Ordinal Data about Personal Well-Being', *New Zealand Economic Papers*, 54: 211–38.
- Kirmanoğlu, H., and Başlevent, C. (2013) 'Life Satisfaction of Ethnic Minority Members: An Examination of Interactions with Immigration, Discrimination, and Citizenship', *Social Indicators Research*, 116: 173–84.
- Knies, G., Nandi, A., and Platt, L. (2016) 'Life Satisfaction, Ethnicity and Neighbourhoods: Is There an Effect of Neighbourhood Ethnic Composition on Life Satisfaction', *Social Science Research*, 60: 110–24.
- Kóczán, Z. (2016) '(Why) Are Immigrants Unhappy', IZA Journal of Migration, 5: 3.
- Kogan, I., Shen, J., and Siegert, M. (2018) 'What Makes a Satisfied Immigrant? Host-Country Characteristics and Immigrants' Life Satisfaction in Eighteen European Countries', *Journal of Happiness Studies*. Stud, 19: 1783–809.

- Laurence, J. (2009) 'The Effect of Ethnic Diversity and Community Disadvantage on Social Cohesion: A Multi-Level Analysis of Social Capital and Interethnic Relations in UK Communities', *European Sociological Review*, 27: 70–89.
- Maggio, C. (2021) 'Demographic Change and Perceptions of Racism', *Du Bois Review:* Social Science Research on Race, 18: 251–87.
- Mazziotta, A. et al. (2015) '(How) Does Positive and Negative Extended Cross-Group Contact Predict Direct Cross-Group Contact and Intergroup Attitudes', *European Journal of Social Psychology. Psych*, 45: 653–67.
- Meuleman, B., and Billiet, J. (2012) 'Measuring Attitudes toward Immigration in Europe: The Cross–Cultural Validity of the ESS Immigration Scales', *Ask. Research & Methods*, 21: 5–29.
- Meuleman, B., Davidov, E., and Billiet, J. (2009) 'Changing Attitudes toward Immigration in Europe, 2002-2007: A Dynamic Group Conflict Theory Approach', Social Science Research, 38: 352–65.
- Moulton, B. R. (1990) 'An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables on Micro Units', *The Review of Economics and Statistics*, 72: 334–8.
- Nandi, A., Luthra, R., and Benzeval, M. (2020) 'When Does Hate Hurt the Most? Generational Differences in the Association between Ethnic and Racial Harassment, Ethnic Attachment, and Mental Health', *Ethnic and Racial Studies*, 43: 327–47.
- Obućina, O. (2012) 'The Patterns of Satisfaction Among Immigrants in Germany', *Social Indicators Research*, 113: 1105–27.
- Pettigrew, T. F. (1998) 'Intergroup Contact Theory', *Annual Review of Psychology*, 49: 65–85.
- Pettigrew, T. F., and Tropp, L. R. (2011) When Groups Meet: The Dynamics of Intergroup Contact, New York, NY: Psychology Press.
- Pettigrew, T., and Fraser Hewstone, M. (2017) 'The Single Factor Fallacy: Implications of Missing Critical Variables from an Analysis of Intergroup Contact Theory1', *Social Issues and Policy Reviewreview*, 11: 8–37.
- Putnam, R. D. (2007) 'E Pluribus Unum: Diversity and Community in the Twenty-First Century The 2006 Johan Skytte Prize Lecture', *Scandinavian Political Studies*, 30: 137–74.
- Rustenbach, E. (2010) 'Sources of Negative Attitudes toward Immigrants in Europe: A Multi-Level Analysis', *International Migration Review*, 44: 53–77.
- Safi, M. (2010) 'Immigrants' Life Satisfaction in Europe: Between Assimilation and Discrimination', *European Sociological Review*, 26: 159–76.
- Schuman, H., Steeh, C., and Bobo, L. (1985) 'Racial attitudes in America: Trends and interpretations', xiv, 260–xiv, 60. Cambridge, MA, US: Harvard University Press.
- Sapeha, H. (2015) 'Explaining Variations in Immigrants' Satisfaction with Their Settlement Experience', *Journal of International Migration and Integration*, 16: 891–910.
- Shook, N. J., and Clay, R. (2012) 'Interracial Roommate Relationships: A Mechanism for Promoting Sense of Belonging at University and Academic Performance', *Journal of Experimental Social Psychology*, 48: 1168–72.
- Stevenson, B., and Wolfers, J. (2008) 'Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox', *Brookings Papers on Economic Activity*, 39: 1–102.

- Tip, L. K. et al. (2018) 'Improving Refugee Well-Being With Better Language Skills and More Intergroup Contact', *Social Psychological and Personality Science*, 10: 144–51.
- van Praag, B.M.S. et al. (2003) 'The Anatomy of Subjective Well-Being', *Journal of Economic Behavior & Organization*, 51: 29–49.
- Veenhoven, R. (1996) 'The Study of Life Satisfaction', in R. Veenhoven, W. E. Saris, A. C. Scherpenzeel, and B. Bunting (ed.) A Comparative Study of Satisfaction with Life in Europe, pp. 11–48. Budapest: Eötvös University Press.
- —— (2000) 'Freedom and Happiness: A Comparative Study in Forty-four Nations in the Early 1990s', in S. Diener, and M. Eunkook (ed.) *Culture and Subjective Well-Being*, pp. 257–88. London: The MIT Press.
- —— (2012) 'Cross-National Differences in Happiness: Cultural Measurement Bias or Effect of Culture', *International Journal of Wellbeing*, 2: 333–53.
- Verkuyten, M. (2008) 'Life Satisfaction Among Ethnic Minorities: The Role of Discrimination and Group Identification', *Social Indicators Research*, 89: 391–404.
- Vohra, N., and Adair, J. (2000) 'Life Satisfaction of Indian Immigrants in Canada', *Psychology and Developing Societies*, 12: 109–38.