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**Comparing Subjective Well-Being and its Predictors
Between Immigrants of Heterogeneous National Origins:
Evidence From German Panel Data**

Master's thesis
Submission Date: 09.11.2023

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Subject: International Development
Semester: Summer term 2023
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Abstract

Like many developed nations, Germany struggles with its declining population due to low birth rates and increasing life expectancy. This leads to a shortage of workers, which in turn makes sustaining the social welfare system increasingly difficult. Economists argue that immigrants are desperately needed to ensure economic growth and prevent the breakdown of the nation's social security system. This study, based on the German Socio-Economic Panel (SOEP), analyzes the well-being of first-generation immigrants in Germany and its determinants with a particular focus on differences regarding the immigrants' origin. Understanding the factors that influence the life satisfaction of Germany's immigrants provides insights on how to improve their well-being and thereby develop policies that make Germany more attractive for permanent migration in order to address the demographic changes and ensure economic stability. The results highlight the importance of health, employment security, a sense of belonging, as well as the detrimental effects of discrimination and xenophobia. The study demonstrates the necessity for further research into the heterogeneity among immigrants.

Key Words: Immigration, Life Satisfaction, Well-Being, Socioeconomic Factors, Germany

Contents

Figure directory	I
Table directory	II
Abbreviation directory	III
1 Introduction	1
2 Theoretical Perspective on Subjective Well-Being	2
2.1 Dimensions of Subjective Well-Being	2
2.2 Mechanisms behind Changes in Well-Being	3
2.2.1 Adaptation Dynamics	3
2.2.2 Aspiration Theory	4
2.2.3 Attribution Theory	4
3 Literature Review	4
3.1 Immigrants in Germany	4
3.2 Subjective Well-Being and Culture	6
4 Data Sources	6
4.1 The Integrated Values Surveys	7
4.2 The OECD: How's Life – Well-being database	8
4.3 The German Socio-Economic Panel	8
4.4 Global Indices: Cultural Values and Political Freedom	9
5 Econometric Methods	10
5.1 Variable Definitions	10
5.2 Pooled OLS	11
5.3 Two-Way Fixed Effects Regression	12
5.4 Coarsened Exact Matching	12
5.4.1 Binning	13
5.4.2 Weighting & Evaluation of the Matching Outcome	13
5.4.3 Variable Selection	14
5.5 Correlation Analysis	15
6 Results	15
6.1 Descriptive Statistics	15
6.1.1 Gender Differences	16
6.1.2 Age	17
6.1.3 Years Since Migration	17
6.1.4 Evolution of Life Satisfaction from 1984 to 2020	18

6.1.5	Life Satisfaction by Origin Country	19
6.2	Regression Analysis	21
6.2.1	Pooled OLS	21
6.2.2	Fixed Effects Regression	23
6.2.3	Young and Educated Immigrants	23
6.3	Cross-Country Patterns in Immigrant Well-Being	28
6.4	Robustness	30
6.4.1	Pooled OLS	30
6.4.2	Two-way Fixed Effects Regression	31
7	Discussion	33
7.1	Findings and Interpretations	33
7.2	Implications for Policy and Practice	35
7.3	Limitations and Directions for Future Research	37
8	Contributions to the Literature & Conclusion	39
	Bibliography	IV
	Appendix	IX

List of Figures

1	Life Satisfaction by Age (95% CI)	17
2	Life Satisfaction by YSM (95% CI)	18
3	Life Satisfaction by Year (95% CI)	19
4	Deviation from Mean Immigrant LS (2005-2020)	20
5	LS Difference to Peers in Origin Country (2005-2020)	20
6	Country LS Differences (Matched)	29
7	Correlations between Satisfaction Levels and Socio-Political Indicators	30
8	Age Cohort Satisfaction by Year	XII
9	LS Difference to Peers in Origin Country (Matched)	XIII

List of Tables

1	Descriptive Comparison of Natives and Immigrants	16
2	Pooled OLS Regression Table	24
3	Fixed Effects Regression Table	25
4	POLS & FE: Young & Educated Immigrants	27
5	FE Regression - Robustness Check	32
6	Descriptive Comparison of Female and Male Immigrants	IX
7	Pooled OLS - Robustness Check	XI
8	Collinearity Diagnostics 1	XIV
9	Collinearity Diagnostics 2	XV
10	Breusch-Pagan/Cook-Weisberg Test	XV
11	Hausman Test	XV
12	Table of Variables	XVI

List of Acronyms

CASMIN	Comparative Analysis of Social Mobility in Industrial Nations
CEM	Coarsened Exact Matching
EPBR	Equal Percent Bias Reducing
EVS	European Value Surveys
FE	Fixed effects
FIW	Freedom in the World
IVS	Integrated Value Surveys
LS	Life satisfaction
MIB	Monotonic Imbalance Bounding
OECD	Organisation for Economic Co-operation and Development
PMB	Person with a migration background
POLS	Pooled ordinary least squares
SMD	Standardized mean difference
SOEP	(German) Socio-Economic Panel
SWB	Subjective Well-Being
WVS	World Value Surveys
YSM	Years Since Migration

1 Introduction

In recent decades, aging populations, coupled with low birth rates, have significantly impacted many developed countries. As Europe's largest economy, Germany faces labor shortages, consequently leading to difficulties in financing its social welfare system, a situation exacerbated by these demographic shifts.

Despite an increase in the overall population, most notably due to the introduction of guest worker programs in the 1950s to 1970s, the influx of Yugoslav refugees in the early 1990s, the 2015 migration crisis as well as the recent war in Ukraine, the demographic trends remain unfavorable. Since 1972 the death rate outweighs births. ("Lebendgeborene, Gestorbene, Geburten-/Sterbeüberschuss (ab 1950)", n.d.,) While the share of the middle-aged population has remained stable, the share of individuals aged 65 or older has risen from 10% in 1950 to 22% in 2021 while the population of people under 15 declined from 23% to 14%. ("Demografischer Wandel", 2023)

Economists estimate that up to 1.5 million immigrants per year are necessary to maintain the number of workers. ("Wirtschaftsweise fordert 1,5 Millionen Zuwanderer", 2023) Yet, within five years, 20 to 50 percent of immigrants leave their host country. (OECD, 2008) One significant factor influencing the likelihood of remaining in a host country is *subjective well-being* (SWB). Consequently, understanding the determinants of the immigrant's well-being as well as the disparities among sub-populations of migrants, can inform policies designed to attract, retain and integrate immigrants into German society.

While the literature on the economic impact of immigrants is extensive and research delves into immigrants' well-being, there exists a gap regarding the heterogeneity of well-being and its determinants within immigrant populations. This thesis aims to bridge this gap by examining national origins as a factor for explaining the well-being of first-generation immigrants and by exploring disparities within the immigrant population. It is crucial to consider the heterogeneity within the immigrant population to formulate more effective policies that enhance well-being and integration, thereby improving the economic situation in Germany or, where applicable, in other countries.

For the analysis, methods from descriptive and inferential statistics are applied. The descriptive analysis aims to study the life satisfaction of migrants and their sub-populations, the differences to Germans without a direct migration background as well as how these variables change over time. Furthermore, pooled ordinary least squares (POLS) and fixed effects (FE) regressions will be used to investigate the determinants of life satisfaction and their relationship to each other. Since the aim is to find measures to counteract the demographic decline, there will be a separate analysis of young employees and students due to their importance as part of the current

and future workforce. Finally, a matching approach will be employed to quantify the differences between immigrants and their counterparts who stay in the source country. This approach allows us to make assumptions about the characteristics of origin country and their relationship to the well-being of emigrants to Germany.

The subsequent section will offer an overview of the dimensions of subjective well-being, their measurement methods, as well as the mechanisms that influence changes in well-being. After this, the available research literature will be reviewed and the data and its preparation will be presented. The methodology section describes the theory behind the regression analyses and causal inference and clarifies the choices behind these methods. This is followed by the results of the data analysis, which is accompanied by robustness checks and an acknowledgment of the limitations of this study. The discussion section explores the implications of the outcomes, from which potential policy recommendations are derived. Finally, the thesis concludes with a summary of the findings and suggestions for how further research could continue to advance the understanding in this area.

2 Theoretical Perspective on Subjective Well-Being

In line with this study's focus on the determinants of immigrants' well-being, it is crucial to understand the facets of subjective well-being. SWB has gained prominence in economic research, with its own sub-field *economics of happiness*. This chapter provides a brief introduction to the main components of well-being - life satisfaction, affect and eudaimonia -, how they are measured and how reliable these measures are.

2.1 Dimensions of Subjective Well-Being

Life satisfaction is the most comprehensive measure of well-being. It represents an overall assessment of an individual's life, taking their personal expectations and circumstances into account. It relates to a considerable amount of economic variables, such as income levels and employment. The *Easterlin paradox* (Easterlin, 1974) is one of the earliest and most well-known studies of the interplay between economics and satisfaction, suggesting that higher incomes are associated with higher well-being until a certain level after which increasing income has no effect on life satisfaction. The most commonly used measure of life satisfaction is the Cantril Ladder (Cantril, 1965), which asks respondents to rate their life from 0 (*their worst possible life*), to 10 (*their best possible life*). Nevertheless, the cultural contexts and various biases in responses such as socially desirable responses need to be considered. These issues can be mitigated by a thought-out survey design that includes questions aimed at adjusting for these biases.

Affect is a short-term measure of well-being, reflecting an individual's immediate

emotional state. (Diener, 1994) It is closely linked to economic behaviors, including decision-making, consumption and evaluations of risk and uncertainty. (Kahneman, 2011) Common ways of measuring affect are the Day Reconstruction Method (Kahneman et al., 2004) and the Experience Sampling Method (Larson & Csikszentmihalyi, 2014). The Day Reconstruction Method asks people to reflect on their daily activities and the emotions they experienced, while the Experience Sampling Method involves assessing their affective state in real-time or shortly thereafter. However, it's important to note that these methods can be susceptible to bias caused by false recalls, heuristic shortcuts, or attrition due to the time-consuming nature of the approaches.

Eudaimonia (from Greek: 'good spirit') describes a life led by virtue and purpose, often referred to as flourishing. Although not the first to write about the philosophy of eudaimonia, Aristotle and his work 'Nicomachean Ethics' are most commonly associated with the concept. Aristotle views virtues such as justice, leadership, reason, and friendship as integral parts of eudaimonia. In economics, it can for instance be related to factors like job satisfaction and higher productivity, which often result from engaging in meaningful work. Assessing eudaimonia can be complex due to its subjective and multidimensional nature, and tools such as the Psychological Wellbeing Scale (Ryff, 2013) are used for this purpose.

This study utilizes a 0-to-10 life satisfaction scale as an indicator of subjective well-being.

2.2 Mechanisms behind Changes in Well-Being

Understanding the psychological mechanisms that underpin well-being is essential for analyzing life satisfaction among immigrants. Adaptation, aspiration, and attribution are vital to understanding the dynamics of well-being.

2.2.1 Adaptation Dynamics

The impact of life-changing events does not necessarily endure, whether positive or negative. Brickman et al. (1978) investigated this effect on lottery winners and accident victims. Their *hedonic treadmill* theory explains the adaptation as a two-step mechanism. Initially, this diminishes the effect of other stimuli compared to the life event, keeping the overall happiness constant. The second process involves habituation. Over time, the impact of the event vanishes and a new baseline is established, leading to a perception of subsequent events as relative to the positive or negative shock caused by the life changing event. Diener et al. (2006) expanded on adaptation theory with the finding that individuals do not return to a neutral set point and they identify the existence of multiple set points which vary based on a range of individual factors.

2.2.2 Aspiration Theory

Richard Easterlin (1974, 1995) explains the decrease in marginal well-being from a higher income by the concept of aspiration. The fulfillment of one's aspirations improves well-being but would furthermore raise aspirations and eventually lead to a return to the baseline SWB. This results in a gap between the actual and the anticipated benefits from increased income. Consequently, individuals are not willing to return to their previous income levels and continue to pursue increases in income. Additionally, aspirations depend on reference groups. These comparisons are based on sufficiently similar populations and raise or lower aspirations according to the reference group.

2.2.3 Attribution Theory

An internal locus of control reflects the belief that one's experiences are a consequence of one's own actions, whereas an external locus of control is perceived as outside of one's influence. Individuals perceiving a higher locus of control by attributing their circumstances to their own actions tend to report greater subjective well-being than those with a lower perceived locus of control. This relationship might be a result of individual differences in personality or of outcomes that result from a greater control over one's life. While having greater control over one's life positively affects well-being, it also comes with higher costs related to information processing and decision-making. (Rotter, 1966)

3 Literature Review

This literature review examines the literature to migrant life satisfaction. It explores the current state of research regarding the well-being among migrants, delving into factors that shape their experiences and outcomes. The review then considers the relationship of subjective well-being and cultural influences.

3.1 Immigrants in Germany

Well-Being of Migrants

Migrants tend to experience a dip in life satisfaction 2-3 years prior to the emigration, followed by a recovery to the baseline level (Hendriks & Burger, 2021). Erlinghagen (2016) interprets this as a consequence of a preparation period, based on German Socio-Economic Panel (SOEP) data.

Newly immigrated individuals show a high level of life satisfaction compared to natives. This is the case "irrespective of their national, legal, and cultural background". (Brockmann, 2021, p. 11) Brockmann explains this by the unique personality characteristics of migrants, who tend to exhibit higher levels of openness

as well as neuroticism. While openness to new experiences can evidently lead to an increase in well-being, neuroticism is generally associated with lower life satisfaction. However, the negative effect of neuroticism is not observed in newcomers to Germany. First-generation immigrants appear to be more resilient to negative affects than the general population and negative social experiences such as the loss of a partner have a lower effect on their well-being. This is possibly a consequence of adaptation caused by social losses experienced due to emigration. Related to this, migrants appear to have higher than average aspirations which will not be satisfied post-migration, overestimating extrinsic factors (Hendriks & Burger, 2021), leading to a decrease in life satisfaction. (Czaika & Vothknecht, 2014)

Negative gaps in well-being between migrants and the native population can be explained, according to Hendriks and Burger (2021) worse economic outcomes compared to the native population, as well as negative effects caused by comparisons. Furthermore, cultural clashes, experiences of discrimination, and language limitations limit the gains in life satisfaction through migration.

Staying Intentions of German Immigrants

On an international level, a U-shaped relationship between happiness and emigration can be found: emigration is more likely to occur in countries that are very happy or unhappy. However, this result does not consider restrictions on movement across countries. Furthermore, the happiness distributions of emigrants is unknown. (Polgreen & Simpson, 2011)

For German migrants, Shamsuddin and Katsaiti 2020 find that intentions to emigrate decrease with higher life satisfaction. Satisfaction with income, work and dwelling significantly increase the likelihood of migrants staying in Germany permanently as well. Hostility and origin-related disadvantages do have a negative effect on staying intentions. Women's intention to stay also depends on the number of children in their household as well as the performance of their reference group which consists of individuals of similar age, education as well as the same sex and country of origin. Male migrants' duration of stay is related to their own performance. Lower education in men is associated with a higher likelihood of staying, possibly due to fewer opportunities abroad compared to well-educated peers.

With regard to Turkish immigrants, Kuhlenkasper and Steinhardt (2012) confirm the previous finding that migrants with low skills have a higher likelihood of staying in Germany permanently. They find that non-Turkish immigrants exhibit a U-shape relationship where the low- and high-skilled are more likely to leave Germany compared to middle-skilled immigrants. Furthermore, non-active participation in the labor market increases the likelihood of emigration. Outmigration occurs most likely around year 30 or retirement age.

Constant and Massey 2003 confirm the role of employment regarding the intention

to stay in Germany and additionally highlight the influence of social networks as well as the connectedness to Germany. The authors find that immigrants return home if the ties to the origin country are stronger.

Not only conditions in the host country play a role in the decision to return to the origin country for German immigrants. This could be observed in the return migration of German immigrants to Türkiye during its economic boom. (OECD, 2008)

3.2 Subjective Well-Being and Culture

Multiple concepts to the comparisons of well-being exist across cultures. Tov and Diener (2009) categorize some of them into the dimensional approach, uniqueness approach, and identity approach. The dimensional approach envisions sources of well-being as universal among societies but might not provide these sources equally. The second category considers emotions as a social construct that strongly vary across cultures. This view can be backed up by the fact that cultures may not have words for certain experiences or attribute them to feelings that other cultures do not relate with that experience. The third view, the identity approach, suggests that cultures might differ in what determines their SWB but overall experience similar levels of well-being. The authors argue that emotions are at least partly influenced by cultural norms and that emotions have a higher weight individualist cultures when evaluating life satisfaction.

Individualism is associated with higher well-being. This might not a direct effect of an individualistic way of life but instead a result of the conditioning in individualistic societies to maximize SWB. Furthermore, happiness research is largely shaped by WEIRD (Western, Educated, Industrialized, Rich and Democratic) societies, not capturing interdependent factors of happiness. (Krys et al., 2023) For example, East Asians and East Europeans have a different attitude towards well-being compared to North Americans, emphasizing its fleeting nature and potential negative effects such as causing envy in other people. Stavrova, 2019

4 Data Sources

This study utilizes version 37 of the German Socio-Economic Panel as its primary dataset. (Liebig et al., 2022) It includes data from 131452 individuals and 47695 households from 1984 to 2020. To obtain life satisfaction data from the immigrants' origin countries, the publicly available World Value Surveys (WVS) and European Value Surveys (EVS) are made use of. This joint EVS-WVS data set (EVS/WVS, 2022) is also referred to as Integrated Value Surveys (IVS). The IVS includes cross-sectional longitudinal data from 1981 to 2022, spanning 118 countries and territories. Given the limited scope of the IVS data, it is supplemented by life satisfaction data

from the Organisation for Economic Co-operation and Development (OECD) Well-Being database (Organization for Economic Co-operation and Development (OECD), 2023). To combine the data, peer life satisfaction for each country-cohort-year combination is stored in a newly created database, to which the OECD values are added thereafter. The data for the remaining years are linearly imputed and Next Observation Carried Backward/Last Observation Carried Forward are applied. The selected methodology is chosen for its simplicity and the lack of country data that would allow the application of more sophisticated methods. Lastly, the database values are mapped onto the corresponding clusters of individuals within the SOEP data set.

Due to limitations in detailed international life satisfaction data, the analyses of this thesis will be conducted on two separate samples: one including all immigrants for the descriptive analysis and one containing only migrants from OECD countries for regression analysis to prevent systematic differences in sample populations. Additionally, this approach provides clear insight for the reader into which origin countries' immigrants are considered in the regression analysis.

To cover the societal and political context as a factor influencing well-being, far-right activity data are obtained from the Wissenschaftszentrum Berlin für Sozialforschung, published by the GESIS - Leibniz-Institut für Sozialwissenschaften (2021). It contains data on 3290 right-wing extremist demonstrations between 2005 and 2020 in Germany. The data contains the number of participants as well as organizing actors, cause and the location of each event.

Finally, for the country-specific analysis, the study makes use of the Freedom in the World (FIW) indices and Hofstede's cultural dimensions.

4.1 The Integrated Values Surveys

To create comparison groups to the German immigrant population, the IVS data is employed. Since it's not possible to directly use the cross-sectional IVS data as the control group, the mean life satisfaction of country-cohort groups is calculated to act as panel data. Age cohorts are categorized into four groups: 18-29 years, 30-44 years, 45-59 years, and one cohort comprising individuals aged 60 years and above. Weights are applied to ensure that the individuals' life satisfaction values are representative on the country level. To allow the merging of all data sets, country codes had to be converted to ISO 3166-1 alpha-3 codes through the pycountry library for standardization. The IVS assesses the respondents' life satisfaction by the following question:

“All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are ‘completely dissatisfied’ and 10 means you are ‘completely satisfied’ where would you put your satisfaction with your life as a whole?”.

4.2 The OECD: How's Life – Well-being database

The OECD's well-being encompasses life satisfaction data from 2004 to 2022, although it contains a significant number of missing values. In certain instances, cohort-level life satisfaction values are unavailable. The data set's cohorts are divided into *Young* (16-29), *Middle-aged* (30-49) and *Old* (50+). It was necessary to adjust the cohorts in order to standardize the cohorts over all data sets:

"18–29": "Young" ,
"30–44": "Middle-aged" ,
"45–59": "Middle-aged" ,
"60+": "Old"

Notwithstanding the mismatch of the categorization, it is sufficient to reproduce the U-shaped age-life satisfaction curve.

If only aggregate data are available, they are assigned to all cohorts. The OECD's data set is compiled from their collected data and supplemented by data from national institutions. Regarding the harmonization between countries, the organization notes: "Despite progress in harmonisation, there are minor differences in the question wording across OECD countries, such as the scale anchors used (e.g. "very dissatisfied" to "very satisfied" in Canada; "completely dissatisfied" and "completely satisfied" in New Zealand) as well as more substantial methodological differences (e.g. identification of the scale mid-point, 5, as "neutral" in Korea). Differences in the population sampled also limit comparability. In the majority of OECD countries, data refer to the population 16 years and older, with minor variations in Australia, Canada, Colombia and New Zealand (where data refer to those aged 15 and older), and Mexico (those aged 18 and older). In Korea, a significantly narrower age range (19-69 years) is considered."

4.3 The German Socio-Economic Panel

This study's data encompasses all individuals in the SOEP aged 18 and over. The term immigrant is used synonymously with first-generation immigrant.

Although research on well-being in children is relevant to the context of this study, the data for children is less comprehensive and outside of the scope of this thesis as a consequence of different determinants for life satisfaction (such as family dynamics and school environment) Additionally, they face a limited locus of control in comparison to adults.¹

Country variables within the SOEP are not coded in a standard format. As a consequence, the exported labels had to be used to fetch ISO 3166-1 alpha-3 code

¹ Nonetheless, it is necessary to highlight the heightened vulnerability of immigrant children as well as the long-lasting consequences of their neglect during childhood: "Poor health in childhood clearly can result in serious consequences for health, education, and employment in adulthood." (Perreira & Ornelas, 2011)

values analog to the IVS data set. Where possible, the remaining values were manually mapped. This analysis excludes individuals from origin countries that no longer exist or do not have an ISO alpha-3 code. Additionally, references that group several countries together without distinct codes are not included. Continents were assigned automatically by the library `pycountry_convert`, the remaining ones manually. The only transnational country with a large sample size, Türkiye, was assigned to Asia.

The questions used to capture life satisfaction, depending on the survey wave, are as follows: “How satisfied are you with your life, all things considered?”, “How satisfied are you currently with your life in general?”

4.4 Global Indices: Cultural Values and Political Freedom

The Freedom in the World index assesses the civil liberties and political rights of nations. It uses "a combination of on-the-ground research, consultations with local contacts, and information from news articles, nongovernmental organizations, governments, and a variety of other sources. Expert advisers and regional specialists then vet the analysts' conclusions. The final product represents the consensus of the analysts, advisers, and Freedom House staff." (“Freedom in the World”, 2023)

This study uses the *Country and Territory Ratings and Statuses, 1973-2023* data set (Freedom House, 2023) which includes the index’s historical data. Both, the civil liberty and the political rights indices, are assessed on the legacy scale from 1 (*free*) to 7 (*not free*). For the results section, the scales are inverted to allow a more intuitive interpretation of the correlations. The file structure was manually simplified to allow straightforward processing.

Cultural factors are provided by Hofstede’s cultural dimensions (Hofstede, 2023). These encompass six factors describing a society’s traits: *Power Distance*, *Individualism*, *Masculinity*, *Uncertainty Avoidance*, *Long-Term Orientation* and *Indulgence*.

Geert Hofstede’s study, published in 1980 and using data from 1967 to 1978, involved analyzing over 60,000 responses from 116,000 IBM employee questionnaires across more than 50 countries. (Jones, 2007)

Relevant country codes have been manually changed before the processing to fit the ISO standard and therefore the country variables in the other data sets.

5 Econometric Methods

The literature presents a variety of methods for analyzing life satisfaction in panel data. The first question is whether life satisfaction needs to be treated as a cardinal or an ordinal variable. This dispute is outside of the scope of this study. Nevertheless, one can argue that the Candril-Ladder-type questions utilized across all datasets in this study can be considered cardinal, parting the levels of life satisfaction in ten equal intervals. (Van Praag, 2010) For this reason as well as simplicity, this study considers life satisfaction as a cardinal variable.

This still leaves us with numerous options: pooled OLS, fixed effects, random effects, dynamic models and more. Due to the exploratory approach of this study, the straightforward approaches of pooled OLS and fixed effects regressions will be used. The random effects model assumption that observed individual effects are uncorrelated with the independent variables seems implausible, which is confirmed by a Hausman test (p-value = 0.0000, displayed in table 11).

5.1 Variable Definitions

The SOEP data set contains a wide range of harmonized variables and data sets to ensure consistency and comparability over time. Harmonized variables were preferably selected for this analysis to prevent distortions caused by the need to merge multiple variables. The SOEP variables utilized in this analysis are sourced from the datasets: ppathl, pl, bioimmig, pgen, hl, and hbrutto.

To classify continents, country codes were transformed into categories using the pycountry-convert library. However, due to the absence of standard continent codes, the categorization might differ from other sources.

Age is determined by subtracting the survey year from the birth year. This approach avoids unusual age distributions resulting from the SOEP's imputation of missing birth month data. A squared term of age is also included to account for its quadratic relationship with life satisfaction.

To capture health status, a binary variable is used, where 1 indicates poor or bad health, and 0 otherwise.

The variable *Female*, only includes the values *male* and *female*. The codebook does not specify whether the variable represents biological sex or gender identity. Moreover, *German* is coded as a binary variable where 1 signifies that German citizenship has been acquired, and 0 signifies non-citizenship.

Net Income is log-transformed to lessen the effect of outliers and to simplify interpretation. The variable *Refugee* encompasses individuals who identify as refugees or asylum seekers. *Years of Education* are represented not by actual years but by assigned values based on the highest qualification according to the International Standard Classification of Education 97 (ISCED-97), allowing for a comparison of

educational standards.

Concerns about Xenophobia are assessed using varying survey questions related to hostility towards foreigners or minorities in Germany. *Discrimination due to Origin* is encoded based on the frequency of discrimination experiences, with 'Often' and 'Seldom' assigned a value of 1 and 'Never' a value of 0. A sense of German identity is also coded as binary, where values of 'Completely' and 'For the most part' are assigned 1.

German Proficiency is proxied using a compilation of variables such as oral language ability, preference for reading German newspapers, and language spoken with family and friends. The variables capturing religious beliefs are simplified by grouping all Christian and Muslim beliefs together, with other religions and non-religious individuals forming the reference groups.

Social Life is assessed using a negated version of a loneliness variable which is only available for a small part of the SOEP. *Social Life* considers additional factors like neighborhood relations and the number of close friends.

The extent of *Right-Wing Activity* is given by a logarithmic transformation of the participant numbers in far-right demonstrations for each month and state.

Additionally, the regression models incorporates the variables *Age at Migration*, *Number of Children*, and *Years since Migration* (YSM).

The descriptive analysis considers additional variables not included in the regression analysis, excluded due to a low sample size or multicollinearity issues. These specific variables are distance to the origin country, level of contact with Germans, quantity of close friends, experiences of loneliness, being single, employment status, and satisfaction with various life aspects.

5.2 Pooled OLS

Pooled ordinary least squares regression analyzes panel data by combining observations from multiple time periods, treating it as cross-sectional data. Thus, all individual observations and time periods are treated uniformly and the same assumptions as for a non-pooled OLS apply. It does not control for unobserved individual heterogeneity, but allows estimation of time-varying effects.

The following model is used to estimate the determinants of life satisfaction in the immigrant population:

$$Y_{it} = \alpha + \beta \cdot \mathbf{X}_{\text{CONT},it} + \gamma \cdot \mathbf{X}_{\text{DEMO},it} + \delta \cdot \mathbf{X}_{\text{EDUC},it} + \theta \cdot \mathbf{X}_{\text{IMMIG},it} + \lambda \cdot \mathbf{X}_{\text{REL},it} + \mu \cdot \mathbf{X}_{\text{SOC},it} + \phi \cdot \mathbf{X}_{\text{WORK},it} + \epsilon_{it} \quad (1)$$

where Y_{it} is the dependent variable (*Life Satisfaction*) for individual i at time t ; α is the intercept; $\beta, \gamma, \delta, \theta, \lambda, \mu, \phi$ are vectors of coefficients; $\mathbf{X}_{\text{CONT},it}, \mathbf{X}_{\text{DEMO},it}, \mathbf{X}_{\text{EDUC},it}, \mathbf{X}_{\text{IMMIG},it}, \mathbf{X}_{\text{REL},it}, \mathbf{X}_{\text{SOC},it}, \mathbf{X}_{\text{WORK},it}$ are vectors of explanatory variables; and ϵ_{it} is the error term.

Robust White-corrected standard errors are applied due to the significance presence of heteroskedasticity in the error terms.

5.3 Two-Way Fixed Effects Regression

Fixed effects regressions estimate coefficients by controlling for individual characteristics that remain constant over time. This approach presents a significant advantage as it yields consistent and unbiased results, even in presence of a correlation between explanatory and unobserved variables. *Two-way* fixed effects refer to the model's inclusion of both, individual- and time-specific effects. As a result, the model's estimates are not influenced by time-invariant characteristics, such as *Gender* or *Age at Migration*, nor by shocks, like economic developments, that impact all individuals simultaneously.

This study's fixed effects model is based on the pooled OLS, but disregards time-invariant variables and controls for individual and time-fixed effects. Additionally, variables that are highly correlated with the year variable are excluded from the model:

$$Y_{it} = \alpha_0 + \gamma \cdot \mathbf{X}_{\text{DEMO},it} + \delta \cdot \mathbf{X}_{\text{EDUC},it} + \theta \cdot \mathbf{X}_{\text{IMMIG},it} + \lambda \cdot \mathbf{X}_{\text{REL},it} + \mu \cdot \mathbf{X}_{\text{SOC},it} + \phi \cdot \mathbf{X}_{\text{WORK},it} + \alpha_i + \tau_t + \epsilon_{it} \quad (2)$$

where Y_{it} is the dependent variable (*Life Satisfaction*) for individual i at time t ; α_0 is the intercept; $\gamma, \delta, \theta, \lambda, \mu, \phi$ are vectors of coefficients; $\mathbf{X}_{\text{DEMO},it}, \mathbf{X}_{\text{EDUC},it}, \mathbf{X}_{\text{IMMIG},it}, \mathbf{X}_{\text{REL},it}, \mathbf{X}_{\text{SOC},it}, \mathbf{X}_{\text{WORK},it}$ are vectors of explanatory variables; α_i is the individual fixed effect; τ_t is the time fixed effect; and ϵ_{it} is the error term.

Again, robust standard errors are applied. The estimation uses the custom Stata package *reghdfe* (Correia, 2016) for its support of survey weights.

5.4 Coarsened Exact Matching

Coarsened Exact Matching (CEM) is a statistical technique for causal inference. It is used to minimize potential confounding and bias introduced by non-random assignment to treatment groups, thereby creating comparable groups, replicating conditions of randomized experiments, and allows calculating treatment effects. Matching methods fall into two categories: 1. Equal Percent Bias Reducing (EPBR) and 2. Monotonic Imbalance Bounding (MIB). EPBR result in a uniform bias reduction across all matching variables. In contrast, CEM is part of the MIB class which will keep the level of imbalance or decrease it with an increase of matches while EPBR can lead to an increase in bias through inappropriate matches in suboptimal models.

This study employs the Stata package *cem* (Iacus et al., 2009). CEM requires the covariates to be coarsened, this implies the transformation of continuous variables into categorical variables. Cut-points for coarsening can be determined manually or algorithmically. CEM relies only upon the assumption of ignorability, implying that the outcomes must be independent of treatment assignment.

Within CEM, strata are created based on the coarsened covariates. If strata include individuals of both, the control and the treatment group, they are kept, whereas those without are discarded. Subsequently, weights are assigned to individuals within the strata to minimize imbalances. The extent of imbalance is restricted by the amount of coarsening of the variables. As an additional advantage, coarsening choices of one variable do not affect the imbalance of other variables, simplifying the modeling process.

5.4.1 Binning

In this study, it is necessary to apply Coarsened Exact Matching of many origin countries to the control group. To circumvent the time-consuming process of manually adjusting the coarsening of each matching procedure or use one approach for every iteration, coarsening algorithms are utilized. Before matching it is necessary to remove missing data to prevent the creation of its own category. *cem* includes four of these algorithms: Sturge’s rule, Freedman-Diaconis rule, Scott’s rule and Shimazaki-Shinomoto’s rule. For this study, Scott’s rule is used, since it provides the superior trade-off between the number of matches and the minimization of imbalances:

$$\text{bin width} = 3.5\hat{\sigma}_x n^{-1/3} = h. \quad (3)$$

Here h is the bin width, n is the sample size, and $\hat{\sigma}_x$ is the usual estimate of the standard deviation

$$\hat{\sigma}_x = \sqrt{s_x^2} \quad \text{where} \quad s_x^2 = \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2. \quad (4)$$

(Sometimes the coefficient in Eq. (4) is taken to be 3.49). (Scott, 2010, p. 1)

5.4.2 Weighting & Evaluation of the Matching Outcome

Although k-to-k matching, where the control and treatment groups have an equal number of individuals, is a straightforward method that doesn’t require weighting, it results in a limited number of matches. To overcome this limitation, weights need to be employed to account for differences in strata sizes.

The standardized mean difference (SMD) is then utilized to assess the imbalances between the matched individuals across the control and treatment groups. The SMD

is given by:

$$\text{SMD} = \frac{\bar{X}_1 - \bar{X}_2}{s_p} \quad (5)$$

Where:

- $\bar{X}_1$ and $\bar{X}_2$ are the sample means of group 1 and group 2, respectively.
- s_p is the pooled standard deviation, given by:

$$s_p = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}} \quad (6)$$

Where:

- n_1 and n_2 are the sample sizes of group 1 and group 2, respectively.
- s_1^2 and s_2^2 are the variances of group 1 and group 2, respectively.

Countries with covariates of an $\text{SMD} > 0.2$ are excluded. This is higher than the commonly recommended threshold of 0.1. However, the study design necessitates a broader acceptance level to allow the examination of trends and patterns across countries. The significance levels of differences were determined by Welch's t-tests.

Since matching only allows the comparison within country strata, a pooled OLS regression is applied to account for confounders that influence life satisfaction and the residualized value is employed to compare German immigrants by their origin country. While it is not possible to control for all factors, it allows a more balanced comparison of the country strata.

To address a loss of observations, *sklearn*'s iterative imputation method is used to fill in the missing values. This technique predicts missing values from other available features acting as independent variables. After filling the missing values of one feature, it will move to the next. This process is repeated until a convergence value is reached when changes in predicted values become negligible.

5.4.3 Variable Selection

Observations were matched based on variables representing age, gender, education, health condition, unemployment status, and survey year. These variables account for only a limited amount of the explanatory power for life satisfaction. Moreover, harmonizing variables across two data sets, while also accounting for differences between countries and the limited data overlap, prevent a more precise matching approach. The education levels in both datasets are represented by the CASMIN (Comparative Analysis of Social Mobility in Industrial Nations) classification, which provides a standardized measure for comparing educational attainment across countries, making them mostly comparable.

Only origin countries with a minimum of 50 individuals in the SOEP dataset were included. Furthermore, to limit the required computational power, a cap of 10,000 individuals per country was imposed within the merged dataset.

5.5 Correlation Analysis

A correlation analysis reveals the strength and direction of the relationship between two variables. For this study, the interconnectedness between socio-political indicators and life satisfaction levels will be explored. Correlation analysis will be used to identify patterns that may not be immediately apparent. Furthermore, it does not require the specification of a regression model. This approach is advantageous given the challenges of multicollinearity among the indicators and the potential for omitted variable bias.

Kendall's τ is chosen for this study due to its robustness to outliers, ability to handle ordinal data such as the researched indicators, and because it does not necessitate the assumption of normally distributed data.

6 Results

The results section presents the analysis of immigrants, their life satisfaction, how they compare to the natives, and the influence of origin country. The initial part of the analysis focuses on descriptive statistics, providing an overview of the demographic and socioeconomic profile of the immigrant population. This is followed by the results of the regression and the correlation analysis, which explore the determinants of immigrants' life satisfaction and the influence of the respective countries of origin.

6.1 Descriptive Statistics

German immigrants predominantly originate in Europe and Asia, largely from countries that are geographically close to Germany. The average distance to their home country is nearly 3000 kilometers. While nearly 53% of the native population consists of women, the gender ratio among immigrants is balanced. Furthermore, a large contrast can be observed in the number of children: immigrants have 1.2 children on average, compared to the German average of 0.83.

Immigrants are, on average, nearly 5 years younger than Germans, with an average age of 42. About 32% of them hold German citizenship, and 36% feel a sense of German identity. Good German language skills are reported by just over half of the respondents.

Approximately 20% of immigrants are refugees, and 35% experience discrimination based on their origin. Despite this, they tend to be less concerned about xenophobia than Germans.

The immigrant community experiences higher unemployment rates at 10%, compared to 4.4% for Germans, this is mirrored in their lower income levels.

When it comes to social life, immigrants often display stronger marital ties, have fewer individuals who are single, and report greater satisfaction with family life, possibly reflecting the more collectivist values of their countries of origin.

On the whole, immigrants exhibit a slightly higher life satisfaction compared to Germans, although this is a factor influenced by the length of their stay and their younger demographic. Slightly lower levels of satisfaction, however, are observed in terms of income, housing, and leisure time.

Table 1: Descriptive Comparison of Natives and Immigrants

Variable	Group 1: Mean	Group 1: Median	Group 2: Mean	Group 2: Median
CONT: Africa*	-	-	0.0325	0.0000
CONT: Asia*	-	-	0.4032	0.0000
CONT: Europe*	-	-	0.4962	0.0000
CONT: N. America*	-	-	0.0094	0.0000
CONT: Oceania*	-	-	0.0007	0.0000
CONT: S. America*	-	-	0.0081	0.0000
Age*	47.0372	46.0000	42.3848	41.0000
Bad Health*	0.1652	0.0000	0.1724	0.0000
Female*	0.5280	1.0000	0.4964	0.0000
Life Satisfaction*	7.1342	8.0000	7.2018	8.0000
German Citizenship*	0.9795	1.0000	0.3236	0.0000
Net Income*	942.6378	503.0000	708.2583	334.0000
Number of Children*	0.8313	0.0000	1.1987	1.0000
Refugee*	-	-	0.2042	0.0000
Years of Education*	12.2151	11.5000	10.1041	10.5000
Concern about Xenophobia*	0.7347	1.0000	0.6683	1.0000
Disadvantaged due to Origin*	0.0123	0.0000	0.3465	0.0000
Distance to Origin Country*	-	-	2594.5159	2339.0389
Feeling German*	0.7801	1.0000	0.3978	0.0000
Life Satisfaction of Peers*	-	-	6.6009	6.7152
Language Proficiency*	0.9958	1.0000	0.8089	1.0000
Visited Germans in Last Year*	0.9419	1.0000	0.8305	1.0000
Number of Close Friends*	4.2456	3.0000	4.3095	3.0000
Experiencing Loneliness*	3.2452	3.0000	3.1622	3.0000
Living with Legal Partner*	0.5831	1.0000	0.7006	1.0000
Separated from Legal Partner*	0.0217	0.0000	0.0426	0.0000
Single*	0.2568	0.0000	0.1753	0.0000
Widowed or Divorced*	0.1393	0.0000	0.0822	0.0000
Student/in Training*	0.0298	0.0000	0.0239	0.0000
Employed*	0.5241	1.0000	0.4785	0.0000
Retired*	0.1719	0.0000	0.0833	0.0000
Unemployed*	0.0445	0.0000	0.1008	0.0000
Satisfaction with Work*	7.0892	8.0000	7.0954	8.0000
Satisfaction with Income*	6.5485	7.0000	6.1558	6.0000
Satisfaction with Dwelling*	7.8044	8.0000	7.2396	8.0000
Satisfaction with Leisure*	7.0596	8.0000	6.7345	7.0000
Satisfaction with Family Life*	7.8944	8.0000	8.1468	9.0000
Satisfaction with Sleep*	6.7565	7.0000	6.8498	7.0000

* Significance of differences between groups was determined using the Mann–Whitney U test (5% level).

6.1.1 Gender Differences

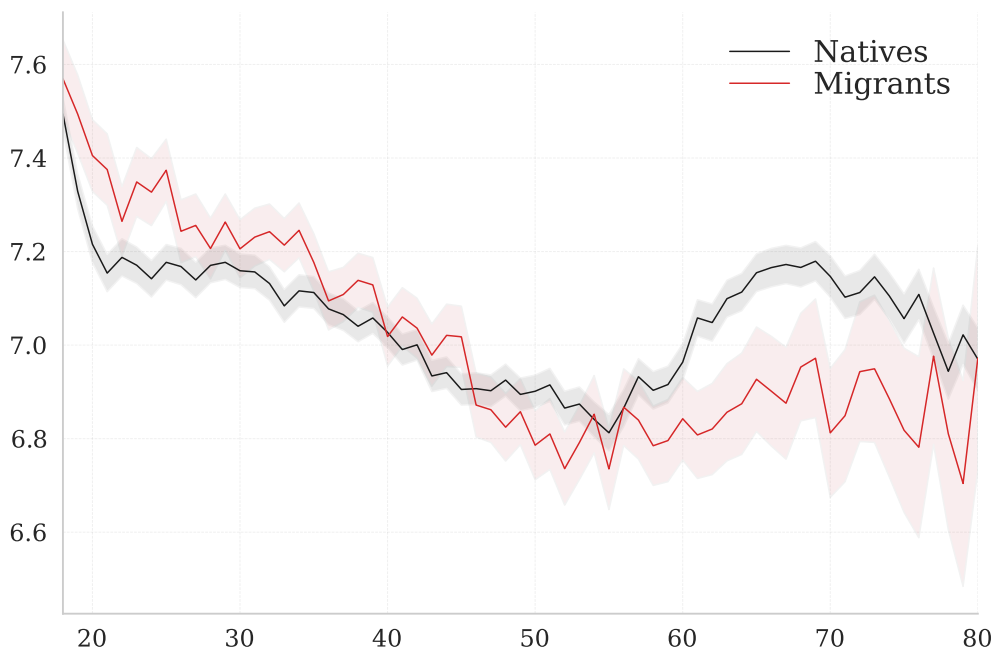
Table 6 shows that differences between men and women are minor in most characteristics. However, a significant difference emerges regarding employment: while 58%

of men are employed, only 37% of women are, who also face a significant income gap. This might be related to worse health conditions in women and a higher percentage of women reporting loneliness.

6.1.2 Age

The influence of age on life satisfaction is often associated with the U-shape, even though there is still dispute about the shape of this relationship. Consistent with the majority of findings, Figure 1 shows that life satisfaction tends to peak during the early years of life. Migrants' life satisfaction tends to be higher than that of natives; the levels converge until individuals are in their mid-40s, where the life satisfaction of natives stabilizes and increases up until their mid/late-60s. Immigrants experience an increase in their early 50s and the gap between migrants and natives is the largest around 65 years of age.

Figure 1: Life Satisfaction by Age (95% CI)



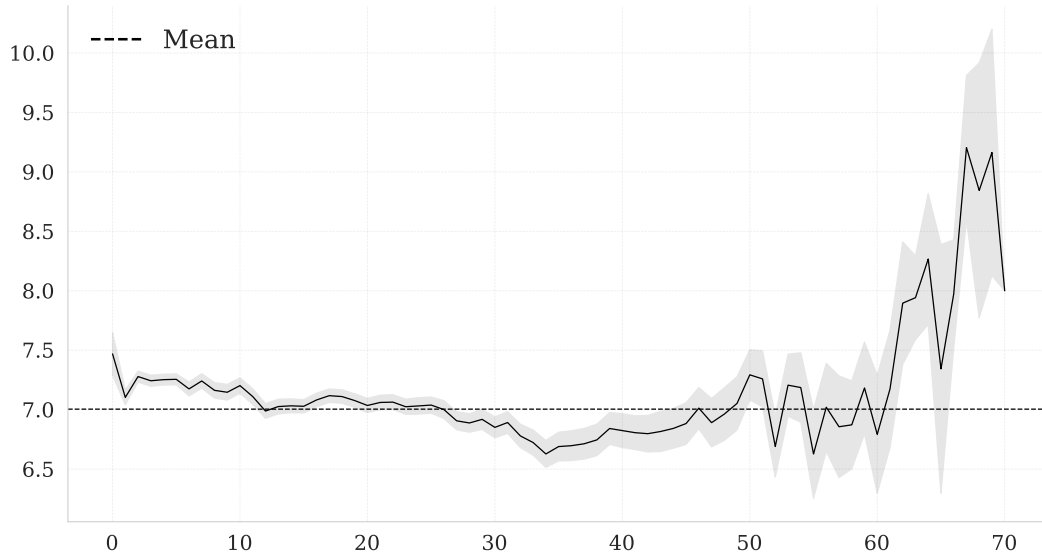
6.1.3 Years Since Migration

As seen in Figure 2, new immigrants show a high level of life satisfaction of around 7.5 which is higher than the majority of the native population as well as the long-term mean of immigrants.

Over time, the positive effect of migration diminishes, especially noticeable after the first year, even though this level remains above average. This generally holds true for the first 12 years and then stabilizes. The striking decline in well-being after the first year can be explained by the previously described adaptation and

aspiration mechanisms. After about 25 years, up to the 45th year in Germany, life satisfaction decreases significantly. Beyond the 50th year, satisfaction levels off to the average, and after 60 years, it rises sharply, although the number of observations becomes significantly smaller. Overall, a U-shaped pattern analogous to the age-life satisfaction relationship is discernible.

Figure 2: Life Satisfaction by YSM (95% CI)



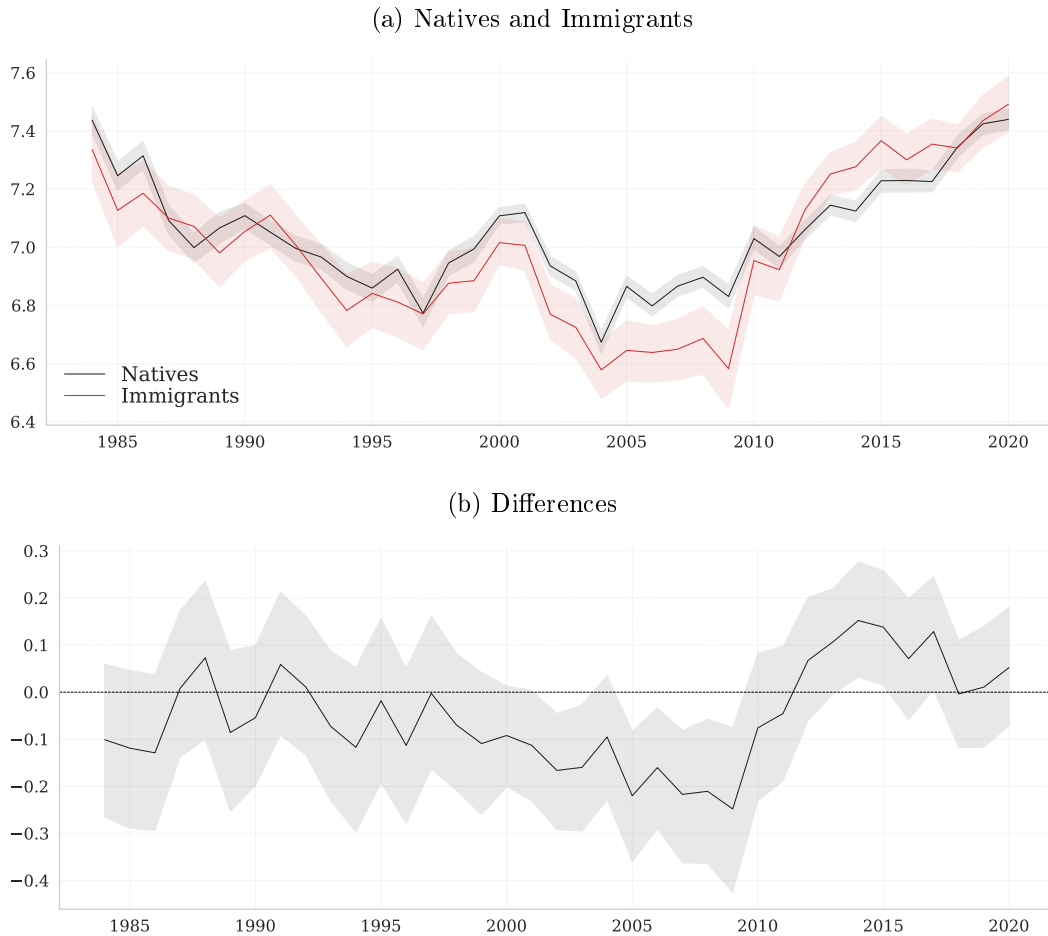
6.1.4 Evolution of Life Satisfaction from 1984 to 2020

Figure 3 depicts the trajectory of life satisfaction in natives and immigrants. From 1984 on life satisfaction levels of around 7.4 decreased in the overall population until the late 1990s when it increased to a level 7 up until 2000. The lowest observed life satisfaction occurred in 2004. Beginning in 2004, the well-being of native individuals improved, resulting in the life satisfaction of immigrants being 0.25 points lower than that of natives by the year 2009. This gap reversed and led to a difference of 0.15 points in 2014. The gap has been closing in recent years and in 2020 life satisfaction has returned to its previous levels of 1984. Although causality cannot be established, the removal of observations of individuals who experienced discrimination reduces the difference in life satisfaction between immigrants and natives from the late 1990s to 2010.

The time series of life satisfaction for each cohort over the years from 1984 to 2020 (Figure 8) provides insights into how and why these two groups differ. Overall, the depiction confirms the trend of migrants being happier than natives to becoming increasingly less satisfied with age compared to their native peers. Comparing the cohorts of natives and immigrants reveals that the dissatisfaction of immigrants in

the 2000s is largely driven by older immigrants, especially those above 60 years of age. This effect is particularly strong among the oldest in the data set who - in contrast to all other cohorts - do not return to native level life satisfaction in the 2020s and furthermore experience the widest gap of all cohorts over the whole sample period during the years from 2008 to 2017. However, the oldest cohort showed the overall highest life satisfaction in the mid- to late 1980s. The increase in migrant life satisfaction since 2010 can be largely attributed to an influx of young immigrants.

Figure 3: Life Satisfaction by Year (95% CI)



6.1.5 Life Satisfaction by Origin Country

To easily identify geographical differences, I computed the deviations from the average of all countries for each year and subsequently calculated the average of these yearly deviations. Only countries with at least 20 individuals in the SOEP data set are displayed.

Patterns emerge when examining these figures regionally (Figure 4). Particularly, Central and South America, as well as Africa, stand out due to their very high or very low levels of life satisfaction. Immigrants from Europe are characterized

Figure 4: Deviation from Mean Immigrant LS (2005-2020)

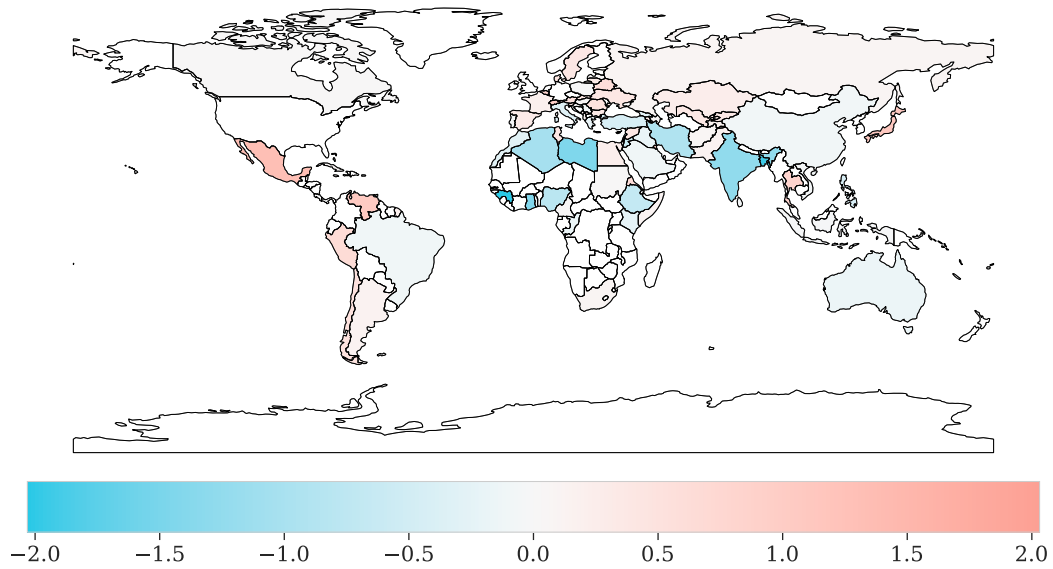
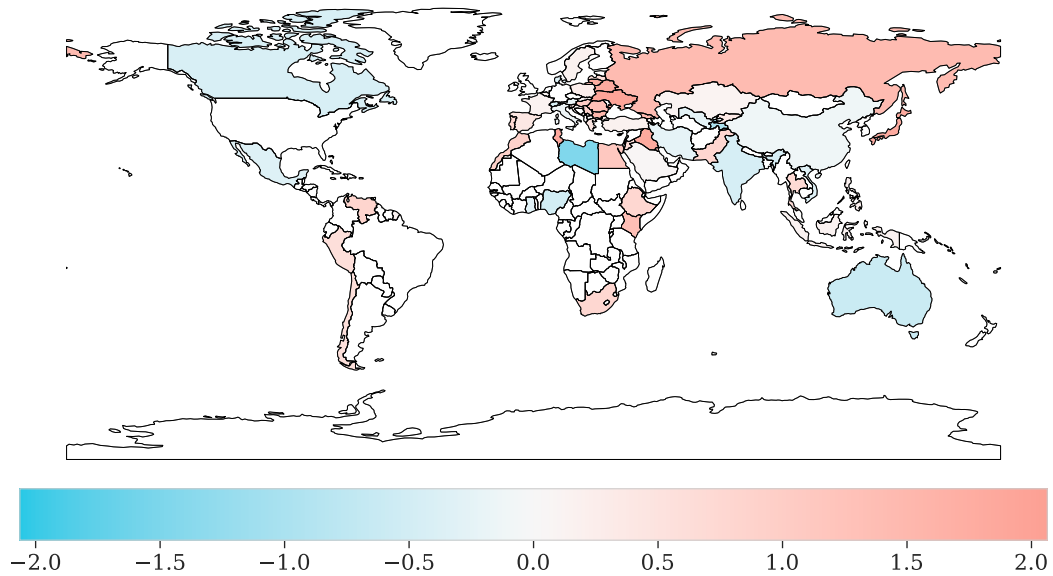


Figure 5: LS Difference to Peers in Origin Country (2005-2020)



almost exclusively by an average to moderately increased life satisfaction. Asia alone shows strong contrasts, yet displays regional tendencies: whilst the life satisfaction of immigrants of East Asian origin is high, it is considerably below average for Southwest Asian immigrants.

Examining individual nations, immigrants from Mexico, Japan, and Venezuela are particularly satisfied, whereas those from Guinea, Bangladesh, and Libya are the

least satisfied with their lives.

Clear trends are less apparent when comparing the life satisfaction of immigrants to their peers (Table 5). Eastern European immigrants, in particular, show a positive difference. A similar observation can be made for Central and South America, even though data is only available for a few of these countries. Likewise, data is missing for most African nations. Nonetheless, a mostly moderately positive difference to peers in the home country can be seen. An outlier is Libya, whose emigrants are strongly dissatisfied compared to their peers.

Both Canada and Australia, as the sole representatives of their continents, exhibit slightly negative values. Asian immigrants generally have a higher life satisfaction, with slightly negative differences observed for South Asians.

The most positive satisfaction differences are found among Moldovan, Palestinian, and Ukrainian immigrants, whereas Libyans, Tajiks, and Colombians present the most negative differences.

6.2 Regression Analysis

In the following the results of the regression analyses are presented. The observations range from 1996 to 2019.

6.2.1 Pooled OLS

The regression analysis, depicted in Table 2, is based on two primary models. The first model includes all variables that add explanatory power, do not lead to a significant loss of observations and show acceptable amounts of multicollinearity in the regression diagnostics. The second model includes variables that considerably reduce the number of observations and might be less robust. The decision to include weights is not straightforward due to the complexity of the SOEP data set and the calculation of its weights. In this study, the weights are included, even though representation is not given, since many variables are only available for certain waves or samples of the SOEP dataset, leading to lost observations.

Including 18,776 observations, the main pooled OLS model accounts for a 19.7% variance in life satisfaction. Statistically, women report higher life satisfaction compared to men. Consistent with descriptive analysis, both, young and old age cohorts, report higher levels of happiness compared to middle-aged individuals. However, the coefficient for the 45-59 age cohort is not significant.

Unemployment is linked to a notable decrease in life satisfaction among migrants (-0.379), whereas retirement and vocational training do not show a significant effect.

The influence of marital status on life satisfaction is significant and varies by relationship type. Those in separate partnerships report lower life satisfaction (-0.577) while cohabitation shows no effect. Being divorced or widowed has a slightly less

negative impact (-0.41) than living separately. Active social engagement positively correlates with life satisfaction. Although statistically significant, education and net income appear to have only a minor influence on life satisfaction levels of 0.03 and 0.07 points, respectively.

Examining country of origin as a determinant reveals large differences. Asians (1.318) and South Americans (1.224) report substantially higher life satisfaction when controlling for other variables. North Americans (0.516) also experience a higher well-being compared to Europeans. Immigrants with origins in Oceania do not differ from Europeans in terms of well-being. The Life satisfaction of peers modestly influences individual satisfaction (0.268), with this effect being statistically significant.

Migration-related coefficients largely conform to expectations. Discrimination (-0.485) and worries about hostility (-0.176) are negative predictors of life satisfaction, as is refugee status (-0.508). Identification with being German has a significant positive impact (0.267). Interestingly, possessing German citizenship correlates negatively with well-being and is associated with a lower life satisfaction by -0.199 points.

The analysis of gender differences reveals several noteworthy effects. There's a significant discrepancy in how vocational status impacts life satisfaction between men and women. For men, student status or vocational training is positively associated with life satisfaction (0.423), whereas for women, the effect is negative, although statistically insignificant. A similar pattern emerges for retirement. Women exhibit a marginally negative coefficient, indicating a lesser impact on their life satisfaction.

The well-being of peers has a threefold stronger positive impact on women compared to men (0.384 vs. 0.130). Additionally, separation from a partner has a more detrimental effect on women. Increasing age correlates with heightened well-being for women, a trend that might emerge from advantages in health and longevity over men. The negative effects of xenophobia on life satisfaction are significant exclusively for men, which may be attributed to their increased exposure to violent threats.

Finally, the positive influence of Muslim beliefs is very high for women (1.349) compared to men (0.697) and the negative consequences of refugee status (0.630) are significant, but only for male respondents.

In the fourth model, additional variables are introduced: *Right-Wing Activity*, *Age at Migration*, *Number of Children*, and *Years since Migration*. All these variables exhibit small coefficient sizes and lack statistical significance.

The fifth and sixth models are modifications of the main model, with certain variables replaced. Specifically, the fifth model omits age cohort dummies, replacing them with *Age* and its squared term. The coefficients for these variables remain relatively consistent with the main model, demonstrating high significance at values of -0.04 and 0.0004, respectively. This upholds the U-shaped relationship between age and life satisfaction.

The sixth model exchanges the numerical variable for *Years of Education* with education dummy variables. These variables indicate having no vocational training or degree and having tertiary education, respectively. Consequently, the reference group comprises those with a vocational qualification or similar education. This model reveals more pronounced variations in coefficients compared to model 5. However, it encompasses just over half the observations of the main model, reducing its reliability. Notably, lacking qualifications corresponds to a decrease in life satisfaction by 0.689 points. In contrast, possessing a tertiary degree appears to have no significant impact on well-being. Furthermore, the effect of Asian origins is strongly decreased (0.548) and is less significant.

6.2.2 Fixed Effects Regression

The fixed effects regressions (Table 3) yield results similar to the pooled OLS models, albeit with smaller coefficients. The model explains approximately half of its 60.2%. Being divorced or widowed, experiencing poor health, unemployment, and separation from a spouse are significant predictors of decreased life satisfaction, each having a comparably negative influence. Key positive predictors encompass maintaining an active social life and possessing a sense of German identity. In contrast, holding German citizenship is associated with a negative impact on life satisfaction. A notable divergence from the pooled OLS model is the missing effect of peers' life satisfaction on migrant well-being. Likewise, net income becomes negative and insignificant, although the effect size is small.

Gender-specific models reveal further details. Cohabitation is a negative predictor for men, decreasing life satisfaction by 0.423 points. In contrast, for women, cohabitation has a lower (0.243 points) and insignificant positive effect. Living separately results in a minor, non-significant decline for women, but for men, it is a robust predictor, decreasing life satisfaction by 0.735 points. Moreover, the sense of German identity positively influences only men, while women do not show a significant change in well-being.

6.2.3 Young and Educated Immigrants

Both the Pooled OLS and Fixed Effects models in Table 4 examine individuals between the ages of 18 and 35 who have at least 10 years of education. The Pooled OLS model has 2393 observations, while the Fixed Effects model has 2323. A consistent observation across both models is that poor health significantly and negatively affects life satisfaction, although the magnitude of this effect is much smaller in the Fixed Effects model.

Neither student status nor being in vocational training has a significant effect on life satisfaction within either model. Across both models, unemployment predicts a

Table 2: Pooled OLS Regression Table

VARIABLES	(1) Model: Main	(2) Model: Main - Female	(3) Model: Main - Male	(4) Model: Full	(5) Model: Age Numerical	(6) Model: Education Dummies
COHORT: 18-29	0.236*** (0.0742)	0.339*** (0.104)	0.178 (0.111)	0.105 (0.103)		0.169* (0.0977)
COHORT: 45-59	-0.0765 (0.0490)	-0.0171 (0.0694)	-0.146** (0.0702)	-0.0480 (0.101)		-0.227*** (0.0643)
COHORT: 60+	0.366*** (0.0733)	0.499*** (0.105)	0.299*** (0.107)	0.300*** (0.166)		0.0463 (0.0952)
CONT: Asia	1.318*** (0.189)	1.438*** (0.279)	1.111*** (0.203)	1.199*** (0.156)	1.340*** (0.192)	0.548* (0.325)
CONT: Oceania	0.0536 (0.442)		0.176 (0.462)	0.133 (0.448)	0.0111 (0.440)	-0.206 (0.427)
CONT: N. America	0.516*** (0.190)	0.541* (0.288)	0.353 (0.228)	0.480* (0.258)	0.496** (0.194)	0.281 (0.272)
CONT: S. America	1.224*** (0.350)	1.240*** (0.227)	1.189* (0.700)	1.172*** (0.355)	1.213*** (0.356)	1.083*** (0.251)
CONT: Oceania = α_0		-				
DEMO: Bad Health	-1.258*** (0.0559)	-1.376*** (0.0780)	-1.061*** (0.0796)	-1.252*** (0.0676)	-1.275*** (0.0557)	-1.242*** (0.0746)
DEMO: German Citizenship	-0.199*** (0.0464)	-0.156** (0.0638)	-0.246*** (0.0680)	-0.347*** (0.0571)	-0.208*** (0.0466)	-0.240*** (0.0618)
DEMO: Net Income (log)	0.0652*** (0.00897)	0.0545*** (0.0111)	0.0867*** (0.0161)	0.0670*** (0.0114)	0.0558*** (0.00881)	0.0730*** (0.0139)
DEMO: Refugee	-0.508*** (0.177)	-0.338 (0.272)	-0.630*** (0.235)	-0.683*** (0.228)	-0.466*** (0.179)	-0.364* (0.220)
DEMO: Female	0.175*** (0.0398)			0.124** (0.0483)	0.162*** (0.0398)	0.196*** (0.0530)
DEMO: Number of Children				-0.00177 (0.0240)		
DEMO: Age					-0.0406*** (0.00901)	
DEMO: Age ²					0.000444*** (9.15e-05)	
EDUC: Years of Education	0.0345*** (0.00784)	0.0409*** (0.0115)	0.0337*** (0.0112)	0.0424*** (0.0102)	0.0346*** (0.00782)	
EDUC: No Qualifications						-0.689*** (0.128)
EDUC: Tertiary Education						-0.0665 (0.0546)
IMMIG: Disadvantaged due to Origin	-0.485*** (0.0431)	-0.508*** (0.0509)	-0.452*** (0.0612)	-0.479*** (0.0537)	-0.482*** (0.0432)	-0.489*** (0.0607)
IMMIG: Life Satisfaction of Peers	0.368*** (0.0379)	0.384*** (0.0537)	0.130** (0.0338)	0.195*** (0.0467)	0.277*** (0.0377)	0.249*** (0.0518)
IMMIG: Feeling German	0.267*** (0.0447)	0.201*** (0.0619)	0.342*** (0.0646)	0.388*** (0.0539)	0.269*** (0.0447)	0.235*** (0.0597)
IMMIG: Concerned about Xenophobia	-0.176*** (0.0431)	-0.0642 (0.0663)	-0.282*** (0.0554)	-0.0839 (0.0534)	-0.171*** (0.0431)	-0.0689 (0.0594)
IMMIG: Proficiency German	-0.00481 (0.0791)	0.0518 (0.116)	-0.0755 (0.107)	0.0657 (0.0802)	0.0159 (0.0793)	0.118 (0.0850)
IMMIG: Far-Right Activity				0.00922 (0.00916)		
IMMIG: Age at Migration				-0.000636 (0.00541)		
IMMIG: Years Since Migration				-0.00824 (0.00537)		
REL: Christian	0.0279 (0.0473)	0.0704 (0.0654)	-0.0191 (0.0681)	-0.0145 (0.0574)	0.0292 (0.0474)	-0.0365 (0.0634)
REL: Muslim	0.686** (0.312)	1.349** (0.622)	0.697** (0.304)	0.649** (0.308)	0.704** (0.315)	0.533** (0.259)
SOC: Active Social Life	0.531*** (0.0717)	0.692*** (0.0965)	0.371*** (0.105)	0.501*** (0.0908)	0.536*** (0.0720)	0.405*** (0.0941)
SOC: Living with Registered Partner	0.102* (0.0591)	0.210** (0.0913)	0.0210 (0.0770)	0.0426 (0.0737)	0.0770 (0.0592)	0.286*** (0.0770)
SOC: Not Living with Partner	-0.577*** (0.119)	-0.609*** (0.170)	-0.474*** (0.168)	-0.573*** (0.136)	-0.609*** (0.120)	-0.407** (0.166)
SOC: Widowed or Divorced	-0.410*** (0.0822)	-0.238** (0.117)	-0.522*** (0.118)	-0.407*** (0.100)	-0.454*** (0.0835)	-0.111 (0.104)
WORK: Student/Vocational Training	0.0584 (0.179)	-0.309 (0.280)	0.423** (0.206)	0.0226 (0.241)	0.0407 (0.179)	0.0916 (0.212)
WORK: Retired	0.0704 (0.0851)	-0.0845 (0.123)	0.264** (0.125)	0.0388 (0.113)	0.0453 (0.0942)	0.0575 (0.126)
WORK: Unemployed	-0.379*** (0.105)	-0.244 (0.149)	-0.423*** (0.156)	-0.336** (0.135)	-0.438*** (0.105)	-0.211 (0.143)
Constant	6.168*** (0.150)	5.907*** (0.217)	6.401*** (0.211)	6.243*** (0.268)	7.132*** (0.249)	6.671*** (0.161)
Observations	18,776	9,675	9,101	12,412	18,776	10,160
R-squared	0.197	0.234	0.170	0.207	0.195	0.213
r2_a	0.196	0.232	0.168	0.205	0.194	0.210
r2	0.197	0.234	0.170	0.207	0.195	0.213

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3: Fixed Effects Regression Table

VARIABLES	(1) Model: Fixed Effects	(2) Model: Fixed Effects - Females	(3) Model: Fixed Effects - Males
DEMO: Bad Health	-0.651*** (0.0591)	-0.757*** (0.0801)	-0.512*** (0.0853)
DEMO: German Citizenship	-0.231** (0.116)	-0.225 (0.170)	-0.206 (0.154)
DEMO: Net Income (log)	0.0123 (0.00926)	-0.00272 (0.0118)	0.0359** (0.0150)
EDUC: Years of Education	0.0616** (0.0282)	0.0868** (0.0377)	0.0304 (0.0405)
IMMIG: Disadvantaged due to Origin	-0.126*** (0.0466)	-0.115* (0.0672)	-0.142** (0.0636)
IMMIG: Life Satisfaction of Peers	0.0125 (0.0783)	0.0540 (0.120)	-0.0564 (0.0989)
IMMIG: Feeling German	0.0753 (0.0518)	0.00918 (0.0754)	0.120* (0.0699)
IMMIG: Concerned about Xenophobia	-0.0881** (0.0430)	-0.0893 (0.0642)	-0.0981* (0.0573)
IMMIG: Proficiency German	0.176 (0.112)	0.193 (0.174)	0.161 (0.143)
SOC: Active Social Life	0.237*** (0.0776)	0.231* (0.121)	0.258*** (0.0969)
SOC: Living with Registered Partner	-0.121 (0.109)	0.243 (0.150)	-0.423*** (0.146)
SOC: Not Living with Partner	-0.514** (0.205)	-0.154 (0.299)	-0.735*** (0.249)
SOC: Widowed or Divorced	-0.565*** (0.162)	-0.335 (0.208)	-0.588** (0.242)
WORK: Student/Vocational Training	0.0696 (0.151)	-0.114 (0.183)	0.290 (0.232)
WORK: Retired	0.193* (0.0991)	0.0414 (0.158)	0.334** (0.130)
WORK: Unemployed	-0.458*** (0.0993)	-0.371*** (0.130)	-0.493*** (0.149)
Constant	6.389*** (0.343)	5.986*** (0.478)	6.719*** (0.483)
Observations	18,777	9,675	9,102
r2_a_within	0.0403	0.0442	0.0420
r2_a	0.539	0.538	0.547
r2_within	0.0413	0.0460	0.0440
r2	0.602	0.602	0.611

Robust standard errors in parentheses

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

decline in life satisfaction. Discrimination based on origin, however, does not have a statistically significant impact in either model.

An active social life maintains a positive association with increased life satisfaction across both models. An increase in life satisfaction among one's peers has a positive, though modest, influence on an individual's own life satisfaction; however, this relationship is not statistically significant in the pooled OLS model. Cohabiting with a registered partner shows a slight enhancement in well-being, as indicated in the pooled OLS model, while being divorced or widowed negatively impacts life satisfaction.

Feeling German has a positive association with life satisfaction in the Pooled OLS model. Being from Asia or the Americas also correlates with about a one-point increase in life satisfaction compared to Europeans. In contrast, the attainment of German citizenship is associated with a drop in life satisfaction. The coefficient is, however, only significant within the pooled OLS model.

The pooled OLS model estimates a significant, positive relationship between income and life satisfaction, possibly because smaller amounts of income may have greater utility for this demographic. Lastly, the pooled OLS model shows that Islamic beliefs are associated with a very high (1.427) and statistically significant increase in life satisfaction.

Table 4: POLS & FE: Young & Educated Immigrants

VARIABLES	(1) Model: Young and Qualified	(2) Model: Young and Qualified FE
CONT: Asia	1.026** (0.514)	
CONT: Oceania = o,	-	
CONT: N. America	1.075*** (0.257)	
CONT: S. America	1.057*** (0.188)	
DEMO: Bad Health	-1.568*** (0.272)	-0.665** (0.305)
DEMO: Age	-0.0166 (0.184)	
DEMO: Age ²	2.28e-05 (0.00328)	
DEMO: German Citizenship	-0.555*** (0.115)	0.104 (0.258)
DEMO: Net Income (log)	0.0571*** (0.0192)	0.00643 (0.0172)
DEMO: Refugee	-0.626* (0.378)	
DEMO: Female	0.0286 (0.0966)	
EDUC: Years of Education	0.00765 (0.0240)	0.0794* (0.0456)
IMMIG: Disadvantaged due to Origin	-0.102 (0.0987)	-0.100 (0.106)
IMMIG: Life Satisfaction of Peers	0.133 (0.116)	0.409* (0.235)
IMMIG: Feeling German	0.242** (0.113)	-0.0125 (0.138)
IMMIG: Concerned about Xenophobia	-0.161 (0.101)	0.0158 (0.111)
IMMIG: Proficiency German	-0.0978 (0.205)	0.145 (0.235)
REL: Christian	0.181 (0.124)	
REL: Muslim	1.427*** (0.489)	
SOC: Active Social Life	0.702*** (0.249)	0.670** (0.282)
SOC: Living with Registered Partner	0.181* (0.0993)	-0.0525 (0.171)
SOC: Not Living with Partner	-0.305 (0.388)	-0.106 (0.357)
SOC: Widowed or Divorced	-0.712** (0.292)	-0.345 (0.410)
WORK: Student/Vocational Training	0.0727 (0.247)	0.155 (0.239)
WORK: Retired = o,	-	-
WORK: Unemployed	-0.811*** (0.271)	-1.063*** (0.326)
Constant	7.222*** (2.479)	5.730*** (0.690)
Observations	2,393	2,323
r2_a	0.168	0.477
r2	0.177	0.602
r2_a_within		0.0429
r2_within		0.0509

Robust standard errors in parentheses

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

6.3 Cross-Country Patterns in Immigrant Well-Being

For the comparison of life satisfaction between German immigrants and their peers, I will at first focus on nationalities with significant differences. It has to be noted that causation can not be established by this analysis, but might nonetheless provide insights about tendencies and impetus for further research.

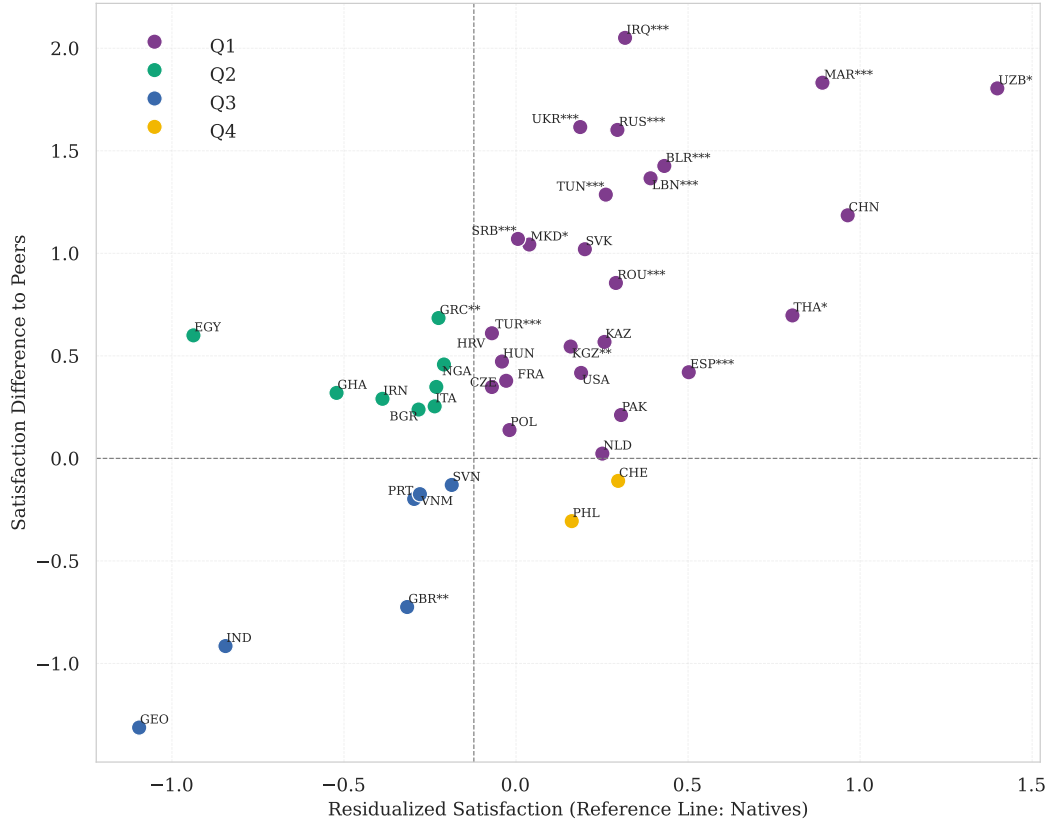
The highest positive differences in satisfaction (Figure 9) are observed for Iraqis, closely followed by Moroccans and Uzbeks, who exhibit an increased life satisfaction of around two points despite significant cultural differences to Germany. This could be due to political instability or a lack of freedom in their home countries. This can be likewise said for other countries of origin that show large differences in well-being. Belarusians, Lebanese, Tunisians, Kyrgyz, and Thais also have significantly higher life satisfaction compared to their illiberal home countries. The difference for Ukrainians and Russians is slightly less compared to the first three nationalities mentioned. However, due to the time span covered by the data of this study, it becomes more challenging to attribute these differences to the respective political climates. The same applies to Serbia and Romania. Other states with positive differences are Spain, Greece, and North Macedonia. Only Great Britain shows a negative difference (-0.72). Significant differences are also observed for India (-0.92) and Georgia (-1.31), but these are not significant.

An analysis of the bivariate distribution of countries regarding residualized life satisfaction levels and life satisfaction differences to their peers (Figure 6), reveals an apparent correlation between these two variables. The previously analyzed countries, show a similar pattern of absolute satisfaction when compared to other immigrant nationalities. Furthermore, it can be observed that immigrants from countries that are politically and culturally close to Germany show little differences in life satisfaction to their peers as well as to natives. Overall, the large majority of country strata falls into quadrant Q1, exhibiting a higher life satisfaction compared to natives and peers.

Figure 7 shows the correlations between the analyzed variables and indicators from *Freedom in the World* and Hofstede's cultural dimensions. It confirms the observation that the origin from an (il)liberal country is correlated with a smaller (larger) LS difference. *Power Distance*, as an indicator of societies that is more accepting of hierarchical power structures, is related to this and shows in line with the previous findings a positive correlation. *Individualism* and *Masculinity*, the latter indicating a preference for achievement, reveal a moderate negative correlation with the life satisfaction to peers. Uncertainty avoidance, a low tolerance for ambiguity, is slightly positive correlated with LS difference, long-term orientation moderately. Life satisfaction of immigrants from societies who tend to be more indulgent, are associated with a lower satisfaction difference.

The correlation between the cultural-political indicators and the the residual-

Figure 6: Country LS Differences (Matched)



*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

ized satisfaction levels reveal only minimal relationships between the variables. The correlations of *Power Distance*, *Masculinity*, *Uncertainty Avoidance* and *Long-Term Orientation* point in the same direction as those of *Difference to Peers*, whereas the indicators for civil and political rights as well as individualism and indulgence do not.

Figure 7: Correlations between Satisfaction Levels and Socio-Political Indicators

	Residualized Satisfaction	Difference to Peers
Political Rights	0.03	-0.46
Civil Liberties	0.03	-0.42
Power Distance	0.07	0.38
Individualism	0.02	-0.40
Masculinity	-0.05	-0.50
Uncertainty Avoidance	0.05	0.23
Long Term Orientation	0.06	0.43
Indulgence	-0.10	-0.21

6.4 Robustness

To validate the findings of this study, the evaluation of different specifications is necessary. These allow us to further investigate the effects of variables and identify potential misspecifications.

6.4.1 Pooled OLS

For the robustness check forward selection was employed (Table 7), based on the specification determined by Stata's *stepwise* command.

Most variables in the main model that are significant retain their significance across all models during the forward selection process, with no considerable changes observed in the size of their coefficients. This is the case for *Bad Health*, *Discrimination*, *Social Life*, *LS of Peers*, *Not Living with Partner*, *Widowed or Divorced*, *Cohort 60+*, *Feeling German*, *North America*, *German Citizenship*, *Xenophobia*, *Years of Education*, *Net Income*, *Refugee* and *Female*.

The effect size of retirement fluctuates between -0.165 and 0.08, with varying significance. These larger fluctuations occur when adding controls for age as well as net income. This is expected and aligns with economic theory, thereby not raising concerns about the robustness of the findings.

The coefficient of the 18-29 age cohort loses its significance and effect size when

adding *Feeling German* and continent dummy variables to the models. It increases and becomes strongly significant after controlling for education and net income.

Furthermore, the effect of having Asian origins increases strongly by including *Years of Education* to the model. This increase is even stronger for South Americans, increasing from 0.276 to 1.158 and becoming very significant. For South Americans, this change is likely caused by very few observations, since only few individuals from Colombia are represented in the corresponding variable.

All other variables are not significant nor experience significant changes. Overall, the main model appears to be robust for most variables. However, the continent dummies warrant further analysis.

6.4.2 Two-way Fixed Effects Regression

For the fixed effects regression (Table 5), slight modifications of the primary model were specified. The first specification uses clustered standard errors based on origin countries. This allows accounting for correlations within these clusters. For example through policies that similarly affect individuals from the same origin country.

The second model omits time fixed effects. This might give insights into the factors that affect immigrants uniformly, such as macroeconomic conditions or policies that are not captured by the two-way fixed effects model.

The results from clustering standard errors indicate an increase in the significance level for the variable *Retired*, moving from 10% to 1%. Furthermore, the significance level of *Not Living with Partner* increased from 10% to 5%. The same is observed for *Years of Education*. *German Proficiency* is significant on the 5% level compared to 10% in the main model. *German Citizenship* decreased from 5% to 10%.

In the second model, concern about xenophobia is not a significant determinant of life satisfaction. German proficiency, however, becomes significant at the 10% level. The sizes of the coefficients are similar to the main model and other variables only show marginal differences.

Table 5: FE Regression - Robustness Check

VARIABLES	(1) Model: FE	(2) Model: FE - Country VCE	(3) Model: FE - No Time FE
DEMO: Bad Health	-0.651*** (0.0591)	-0.651*** (0.0691)	-0.663*** (0.0589)
DEMO: German Citizenship	-0.231** (0.116)	-0.231* (0.115)	-0.247** (0.118)
DEMO: Net Income (log)	0.0123 (0.00926)	0.0123** (0.00602)	0.0141 (0.00933)
EDUC: Years of Education	0.0616** (0.0282)	0.0616*** (0.0214)	0.0283 (0.0239)
IMMIG: Disadvantaged due to Origin	-0.126*** (0.0466)	-0.126*** (0.0329)	-0.131*** (0.0469)
IMMIG: Life Satisfaction of Peers	0.0125 (0.0783)	0.0125 (0.108)	0.0402 (0.0704)
IMMIG: Feeling German	0.0753 (0.0518)	0.0753 (0.0580)	0.0766 (0.0515)
IMMIG: Concerned about Xenophobia	-0.0881** (0.0430)	-0.0881** (0.0412)	-0.0627 (0.0430)
IMMIG: Proficiency German	0.176 (0.112)	0.176* (0.0963)	0.196* (0.111)
SOC: Active Social Life	0.237*** (0.0776)	0.237*** (0.0695)	0.200*** (0.0759)
SOC: Living with Registered Partner	-0.121 (0.109)	-0.121 (0.0975)	-0.172 (0.108)
SOC: Not Living with Partner	-0.514** (0.205)	-0.514*** (0.167)	-0.609*** (0.206)
SOC: Widowed or Divorced	-0.565*** (0.162)	-0.565*** (0.195)	-0.652*** (0.160)
WORK: Student/Vocational Training	0.0696 (0.151)	0.0696 (0.203)	0.0986 (0.149)
WORK: Retired	0.193* (0.0991)	0.193*** (0.0503)	0.156* (0.0916)
WORK: Unemployed	-0.458*** (0.0993)	-0.458*** (0.0650)	-0.463*** (0.0988)
Constant	6.389*** (0.343)	6.389*** (0.289)	6.804*** (0.305)
Observations	18,777	18,777	18,777
r2_a_within	0.0403	0.0403	0.0416
r2_a	0.539	0.539	0.536
r2_within	0.0413	0.0413	0.0425
r2	0.602	0.602	0.599

Robust standard errors in parentheses

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

7 Discussion

The discussion section investigates the implications of the findings, contrasting them with established literature and theoretical expectations. It also explores the potential limitations of the study and suggests directions for future research.

7.1 Findings and Interpretations

Trajectory of Life Satisfaction

Life satisfaction trends in Germany show a fluctuating pattern, with a peak in 1984, a low point in 2004 after a smaller peak around 2000, and a subsequent recovery to levels compared to those in 1984 by 2020. A life satisfaction difference between natives and immigrants was evident from the late 1990s until 2009, after which the it began to converge, with a slight gap persisting for immigrants as of 2014.

When removing observations from individuals who have encountered discrimination, the satisfaction approximately equalizes between the two groups from the late 1990s to 2010. The 2000s was a period of dissatisfaction for older immigrants, with those over 60 years failing to regain the life satisfaction levels of their native counterparts in recent years. The increase in overall immigrant life satisfaction after 2010 can largely be attributed to the immigration of younger populations.

The rapid decrease in life satisfaction levels after 2001 might associated with the aftermath of the 9/11 terror attacks which is supported by the perspective of Zorlu (2019).

Demographics

Age appears to have a very significant effect on the well-being of German immigrants. In the descriptive analysis, life satisfaction (LS) scores are higher for younger migrants than those of natives, but it does not increase after middle age as it does for natives. However, the coefficient for the age 60+ cohort is the largest among all age dummy variables.

Women exhibit slightly higher life satisfaction than men. This aligns with the results of Joshanloo and Jovanović (2020) who found higher satisfaction among women across 166 countries.

Health is the most significant and consistent predictor of life satisfaction, with only a minor impact when controlling for other factors. Women tend to report worse health conditions compared to men.

The number of years of education has a small effect on life satisfaction. This aligns with previous findings (Diener et al., 1999). However, when represented with categorical variables, a strong negative effect is observed for individuals with no qualifications, indicating more complex relationships.

Unemployment has a highly negative impact on LS in German immigrants. This effect appears to be larger than in the general population. (Diener et al., 1999) This study's results do not identify potential causes for this effect, but it might be related to the insecurity regarding residence status, particularly an uncertain asylum status, which can lead to poor mental health. (Hajak et al., 2021) Additionally, unemployment rates are much higher, especially for women.

Net income does not significantly affect well-being, or its effect is negligible. Health is the most significant and consistent predictor of life satisfaction, and controlling for other factors has only a minor impact on its effect size.

Islamic beliefs have a significant and strong impact on subjective well-being (SWB). This study cannot provide explanations, but it might be caused by the omission of social networks in the regression analysis. This assumption is supported by evidence from Allen (2010). Particularly high is the variable's impact for young and educated immigrants, as well as for women.

Migrant-Specific Determinants

Discrimination and concern over xenophobia are negative predictors of life satisfaction. Xenophobia is not significant when omitting time-fixed effects, indicating that the effect might vary over time.

Surprising is the significant negative effect of gaining German citizenship and is contrary to the research of Nesterko et al. (2012) who found a very small positive effect. However, these positive effects might already be captured by the variable *Feeling German*. Another factor might be the classification as *person with a migration background* (PMB) that can create a divide between German citizens with and without migration background. Elrick and Schwartzman (2015) conclude: "Jenkins (1994, 214) argues that attributing to certain groups characteristics like 'socially deficient', 'lacking in some fashion', or 'troublesome' creates the conditions for the kind of systemic racism that results in glass ceilings within institutions and increases the social acceptability of discrimination in everyday social interactions. From this point of view, the meaning of PMB as a social group that is excluded from the national community of citizens may be particularly detrimental. It may not be the act of migration alone that affects one's educational, employment, or personal trajectory, but one's classification as a PMB – with all of that term's contingent social and political meanings." (p. 1551)

Furthermore, refugees are much less satisfied with their lives and life satisfaction strongly depends on the origin. The positive effect is the strongest for Asians and South Americans, to a lesser amount for North Americans, whereas Oceanians do not show elevated LS levels compared to Europeans. For young and educated immigrants, North American origins have an equally strong effect as Asians and South Americans. Additionally, the influence of the LS of peers is higher for women.

The effect of YSM is not significant in the regression model, possibly due to non-linearity, but becomes visible in the descriptive analysis. This can be explained through worse health outcomes over time and, simultaneously, the value placed on health with regards to well-being. (Yaman et al., 2022)

Social Relationships

An active social life significantly and robustly predicts higher life satisfaction, especially among young and educated immigrants.

Immigrants have stronger marital ties and show a higher satisfaction with their family life. Variables related to relationships generally exhibit anticipated signs: Living separately from a partner and being divorced or widowed are associated with a significant and pronounced negative impact on life satisfaction. In contrast, cohabitation results in a modest positive effect compared to singlehood or temporary relationships. Notably, the fixed effects (FE) regression reveals that men report a marked decline in life satisfaction following marriage or entry into a registered partnership.

Cross-Country Patterns

The analysis on the country level shows a pattern of high life satisfaction differences for immigrants from politically unstable or culturally distinct countries compared to Germany, like Iraq, Morocco, and Uzbekistan. The findings suggest a link between an immigrant's country of origin and their life satisfaction in Germany, with those from countries similar to Germany showing smaller differences in satisfaction.

The correlation analysis shows that immigrants from countries with political and cultural similarities to Germany exhibit similar absolute life satisfaction and differences to their peers. Moreover, cultural dimensions such as Power Distance and Long-Term Orientation are positively related to life satisfaction differences, while Individualism and Masculinity have a negative relationship. The correlation of cultural-political factors with residualized life satisfaction levels is limited.

7.2 Implications for Policy and Practice

The results indicate a variety of potential policies to improve subjective well-being among German immigrants. The most consistent finding is the significant impact of health. This is particularly relevant in the context of the refugee crisis of recent years. Asylum seekers, whose residency status is uncertain, have worse mental health and lower well-being compared to those with a secure right to stay. Similarly, living in collective accommodations has negative effects. (Walther et al., 2020) Access to the health care system is more difficult for immigrants with insufficient language skills. Particularly among older immigrants, health literacy is low (Quenzel & Schaeffer,

2016). For asylum seekers, utilizing the health care system presents an even greater barrier. (Bundesministerium für Gesundheit, 2016)

Encouraging immigrants to work in healthcare and cultural competence training can decrease these barriers (Yaman et al., 2022). The World Health Organization provides guidelines to improve health outcomes in migrants (for Europe, 2018) and Richter et al. recommend an immediate mental health screening for asylum seekers after arrival.

Beyond health, employment is a factor with far-reaching effects. Unemployment is associated not only with lower income but also with lower social status and societal participation. Thus, professional employment is an integral component for meeting the psychosocial needs of immigrants and thereby ensuring their well-being (Erlinghagen, 2016). This is particularly true for men. It can also be argued that lower income reduces locus of control, which leads to a sense of helplessness. Thus, barriers for employment need to be lowered. However, improving employment rates might be a complex multidimensional matter, apart from politics relating to discrimination, language proficiency and other factors.

The next critical point is societal cohesion. Discrimination and xenophobia are still common experiences. Even naturalized immigrants are marginalized. Not only do these experiences have negative impacts on the migrants' well-being, but they might also have an impeding effect on contact with natives. Feelings of rejection are detrimental to integration and prevent a sense of belonging to German society. (Shamsuddin & Katsaiti, 2020) Contact to Germans has a positive effect on life satisfaction and is contributing to overall integration and potentially language skills. Despite the many reservations within the German population, immigration has no or a slight positive effect on the satisfaction of natives (Hendriks & Burger, 2021). More than legal and political measures, the life satisfaction of immigrants from within the EU depends on the attitude of natives towards migrants. For non-EU immigrants, the influence of political measures is greater. (Stavrova, 2019) Particularly important is social life among young, educated immigrants. Religious communities also seem to play a significant role in societal participation, especially among female Muslims. Syrian migrants in Germany tend to integrate well in areas offering government-sponsored integration courses. Moreover, students who have been exposed to Syrians in high schools are more likely to form friendships with Syrians in settings outside of school. (Bailey et al., 2022) Generally, societies might benefit from school education that incorporates intercultural competences and/or social psychological to provide the general population with an understanding of the underlying psychological biases and heuristics that can lead to prejudices toward out-groups.

While some researchers recommend an accelerated family reunification to improve well-being (Walther et al., 2020), Brockmann (2021) found that living in a family environment inhibits integration into the German society.

Finally, there are correlations between the characteristics of the countries of origin and the differences in life satisfaction compared to the home country. Implications can only be derived to a limited extent from this. However, more detailed analyses could develop culture-specific measures that enable better integration. The fact that immigrants from illiberal countries show particularly high life satisfaction may be a result of relief or particularly good dealings with marginalized populations in Germany. Either way, provide special measures for potentially traumatized immigrants by war or persecution are necessary.

7.3 Limitations and Directions for Future Research

Several factors limit the validity of this study. Primarily, limited data availability necessitates a simplified analysis. While the SOEP provides extensive data, not all variables are consistently surveyed across periods and samples. As a result, one either has to focus on short periods of time or disregard relevant variables. Additionally, to take advantage of the panel structure effectively, I constructed variables such as social life and language proficiency using multiple proxies, which may have introduced limitations in capturing the true effects of these variables. Furthermore, the need to impute missing observations presented a challenge. Due to computational constraints, simpler imputation methods were used for the full data set instead of more advanced techniques like multiple imputation. While these imputation methods allowed working with the available data, they may have introduced biases or limitations in the analysis.

Similarly, data availability issues regarding subjective well-being apply to the data sets from the Integrated Value Surveys and OECD, which also had to be imputed. Generally, the reported life satisfaction data might suffer from cultural influences and previously mentioned biases.

Some controls commonly used in well-being analyses could not be included. These feature environmental factors, personal characteristics, policies, and cultural influences. Analyzing social networks, crucial for migrants, was not possible due to privacy concerns and would require a separate study. Precise location data, crucial for detailed analysis of social networks, are unavailable in the SOEP data set.

For the regression, bias caused by missing data was minimized by limiting the observed time period. Nevertheless, not all observations could be used, which may affect the overall generalizability of the results. Moreover, simultaneity is a common issue in well-being analysis. For example, social relationships lead to a higher life satisfaction and at the same time, more satisfied individuals are more likely to have a more active social life. Dynamic regression models may capture effects that are not apparent in this study.

In the comparative country analysis, it becomes evident that, despite the size of the SOEP, the data offers only few individuals for most origin countries. The IVS,

which serves as a control group, only contains cross-sectional data, which strongly limits the number of matches. The lack of comparability and overlapping time frames within the origin country sub-populations diminishes the representativeness of the country analysis. Observations are discarded during the matching process, so that the origin country sub-populations are no longer representative of the general population.

The indices used in the correlation analysis faced a significant amount of criticism. According to Bollen and Paxton (2000) the FIW suffered from bias during their analyzed period from 1972 to 1988, favoring countries with certain characteristics. Giannone (2010) attests Freedom House a neoliberal bias and criticizes inconsistent methodologies.

The use of Hofstede's cultural dimension is widespread and likewise widely criticized. The dispute around his work is outside of the scope of this study. Comprehensive criticism was published by Ailon (2008) and McSweeney (2002).

Future Research

This study shows that origin is an important factor for well-being. To quantify these differences, cultural differences should be considered. The fact that residualized life satisfaction shows no correlations while LS difference does might be an indication that the determinants examined in this study are influenced by cultural factors. More precise analyses could lead to better integration and life satisfaction outcomes. However, cultural differences are difficult to capture and generalize.

Furthermore, incorporating social networks could yield more meaningful results. Regional differences and environmental aspects could also provide further insights. Nonetheless, incorporating every variable that impacts subjective well-being presents a significant challenge, particularly in longitudinal studies.

In addition to these analyses, qualitative studies can capture experiences that cannot be quantified. It is also crucial to evaluate political measures and analyze how scientific findings can be communicated to the public to prevent prejudice and populism.

8 Contributions to the Literature & Conclusion

This thesis contributes to the literature by investigating the diverse experiences of German immigrants, particularly by considering peer well-being as a determinant of life satisfaction. This aspect sets the study apart, highlighting the importance of community and shared experiences in the assessment of individual well-being.

The study extends beyond the economic perspective, incorporating sociological, cultural, and psychological dimensions of subjective well-being (SWB). This interdisciplinary approach enables the development of holistic measures that can politically enhance immigrants' welfare and contribute to more robust demographic and economic outcomes.

In conclusion, the study has identified health, employment, and social integration as crucial to the life satisfaction of immigrants, promoting multidimensional policies adjusted to socio-economic and psychological factors. The insights suggest interventions that serve the heterogeneous needs of immigrant populations to improve their integration and contribute to economic stability.

Challenges due to data limitations and variable measurements suggest areas for future research, especially regarding cultural characteristics and social networks. Qualitative studies could further assist our understanding.

In contributing to the literature, this work bridges multiple disciplines, proposing a comprehensive approach to policy-making that can enhance immigrant integration and life satisfaction. It proposes policies that are adjusted to the diversity of immigrant experiences and improve societal cohesion and economic stability.

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Appendix

Table 6: Descriptive Comparison of Female and Male Immigrants

Variable	Females: Mean	Females: Median	Males: Mean	Males: Median
CONT: Africa*	0.0259	0.0000	0.0390	0.0000
CONT: Asia*	0.3762	0.0000	0.4297	0.0000
CONT: Europe*	0.5275	1.0000	0.4653	0.0000
CONT: N. America	0.0098	0.0000	0.0089	0.0000
CONT: Oceania	0.0007	0.0000	0.0007	0.0000
CONT: S. America*	0.0093	0.0000	0.0068	0.0000
Age	42.4666	40.0000	42.3042	41.0000
Bad Health*	0.1931	0.0000	0.1516	0.0000
Female*	1.0000	1.0000	0.0000	0.0000
Life Satisfaction*	7.2239	8.0000	7.1801	8.0000
German Citizenship*	0.3566	0.0000	0.2911	0.0000
Net Income*	430.6430	1.0000	981.8638	920.0000
Number of Children*	1.2375	1.0000	1.1595	1.0000
Refugee*	0.1632	0.0000	0.2447	0.0000
Years of Education*	10.0754	10.0000	10.1325	10.5000
Age at Migration*	24.8586	24.0000	25.2147	25.0000
Concern about Xenophobia*	0.6968	1.0000	0.6401	1.0000
Disadvantaged due to Origin*	0.3355	0.0000	0.3576	0.0000
Distance to Origin Country*	2586.2260	2339.0389	2602.6860	2339.0389
Feeling German*	0.4107	0.0000	0.3839	0.0000
Life Satisfaction of Peers*	6.6255	6.7360	6.5743	6.6869
Language Proficiency	0.8106	1.0000	0.8074	1.0000
Visited Germans in Last Year	0.8325	1.0000	0.8281	1.0000
Years since Migration*	16.7327	15.0000	16.5048	15.0000
Number of Close Friends*	3.9915	3.0000	4.6551	3.0000
Experiencing Loneliness*	3.0750	3.0000	3.2573	4.0000
Living with Legal Partner*	0.7092	1.0000	0.6921	1.0000
Separated from Legal Partner*	0.0391	0.0000	0.0461	0.0000
Single*	0.1319	0.0000	0.2179	0.0000
Widowed or Divorced*	0.1203	0.0000	0.0448	0.0000

Descriptive Comparison of Females and Males in the Immigrant Population

Student/in Training*	0.0180	0.0000	0.0297	0.0000
Employed*	0.3747	0.0000	0.5808	1.0000
Retired*	0.0924	0.0000	0.0752	0.0000
Unemployed*	0.0907	0.0000	0.1107	0.0000
Satisfaction with Work*	7.0689	8.0000	7.1158	8.0000
Satisfaction with Income*	6.2032	6.0000	6.1049	6.0000
Satisfaction with Dwelling*	7.2776	8.0000	7.1987	8.0000
Satisfaction with Leisure*	6.6407	7.0000	6.8348	7.0000
Satisfaction with Family Life*	8.1043	8.0000	8.1979	9.0000
Satisfaction with Sleep*	6.7220	7.0000	7.0033	7.0000

Significance of differences between groups was determined using the Mann–Whitney U test (5% level).

Table 7: Pooled OLS - Robustness Check

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 4	(5) Model 5	(6) Model 6	(7) Model 7	(8) Model 8	(9) Model 9	(10) Model 10	(11) Model 11	(12) Model 12	(13) Model 13	(14) Model 14	(15) Model 15	(16) Model 16	(17) Model 17	(18) Model 18
DEMO: Bad Health	-1.575*** (0.0457)	-1.575*** (0.0457)	-1.575*** (0.0457)	-1.498*** (0.0475)	-1.425*** (0.0478)	-1.400*** (0.0478)	-1.381*** (0.0477)	-1.376*** (0.0483)	-1.330*** (0.0527)	-1.328*** (0.0527)	-1.326*** (0.0526)	-1.324*** (0.0527)	-1.285*** (0.0527)	-1.250*** (0.0530)	-1.238*** (0.0537)	-1.248*** (0.0561)	-1.258*** (0.0559)	-1.258*** (0.0559)
WORK: Student/Vocational Training				0.102 (0.141)	0.0944 (0.148)	0.0524 (0.155)	0.0273 (0.159)	-0.0437 (0.162)	-0.0969 (0.175)	-0.110 (0.171)	-0.0912 (0.171)	-0.0890 (0.171)	0.0314 (0.175)	-0.00315 (0.173)	0.0098 (0.182)	0.0609 (0.177)	0.0522 (0.179)	0.0584 (0.179)
WORK: Retired				-0.0148 (0.0406)	-0.0668 (0.0408)	-0.0182 (0.0410)	0.0123 (0.0423)	-0.164** (0.0637)	-0.160** (0.0699)	-0.160** (0.0699)	-0.164** (0.0700)	-0.165** (0.0699)	-0.142** (0.0701)	0.0801 (0.0711)	0.0465 (0.0778)	0.0377 (0.0847)	0.0706 (0.0851)	0.0704 (0.0851)
WORK: Unemployed				-0.991*** (0.0819)	-0.903*** (0.0822)	-0.843*** (0.0813)	-0.816*** (0.0817)	-0.807*** (0.0815)	-0.766*** (0.0844)	-0.775*** (0.0845)	-0.778*** (0.0844)	-0.776*** (0.0846)	-0.740*** (0.0868)	-0.396*** (0.0881)	-0.376*** (0.103)	-0.434*** (0.104)	-0.375*** (0.105)	-0.379*** (0.105)
INMIG: Disadvantaged due to Origin				-0.583*** (0.0403)	-0.559*** (0.0411)	-0.533*** (0.0408)	-0.577*** (0.0407)	-0.549*** (0.0409)	-0.511*** (0.0415)	-0.516*** (0.0416)	-0.522*** (0.0415)	-0.504*** (0.0415)	-0.489*** (0.0420)	-0.493*** (0.0419)	-0.497*** (0.0432)	-0.488*** (0.0432)	-0.484*** (0.0431)	-0.485*** (0.0431)
SOC: Active Social Life					0.668*** (0.0613)	0.623*** (0.0621)	0.598*** (0.0610)	0.595*** (0.0610)	0.554*** (0.0669)	0.553*** (0.0669)	0.555*** (0.0668)	0.557*** (0.0669)	0.515*** (0.0676)	0.505*** (0.0670)	0.520*** (0.0713)	0.524*** (0.0719)	0.525*** (0.0718)	0.531*** (0.0717)
INMIG: Life Satisfaction of Peers						0.303*** (0.0301)	0.296*** (0.0304)	0.292*** (0.0306)	0.342*** (0.0330)	0.328*** (0.0337)	0.315*** (0.0342)	0.316*** (0.0342)	0.306*** (0.0345)	0.293*** (0.0344)	0.286*** (0.0377)	0.275*** (0.0380)	0.270*** (0.0379)	0.268*** (0.0379)
SOC: Living with Registered Partner							0.0390 (0.0504)	0.0924* (0.0547)	0.0786 (0.0561)	0.0805 (0.0560)	0.0827 (0.0561)	0.0882 (0.0560)	0.0884 (0.0567)	0.104* (0.0568)	0.125** (0.0589)	0.124** (0.0590)	0.101* (0.0590)	0.102* (0.0591)
SOC: Not Living with Partner							-0.367*** (0.109)	-0.369*** (0.111)	-0.540*** (0.116)	-0.542*** (0.115)	-0.541*** (0.115)	-0.542*** (0.114)	-0.592*** (0.114)	-0.591*** (0.114)	-0.539*** (0.118)	-0.547*** (0.120)	-0.578*** (0.119)	-0.577*** (0.119)
SOC: Widowed or Divorced							-0.263*** (0.0670)	-0.219*** (0.0713)	-0.261*** (0.0760)	-0.258*** (0.0758)	-0.252*** (0.0760)	-0.262*** (0.0761)	-0.251*** (0.0767)	-0.239*** (0.0769)	-0.494*** (0.0814)	-0.352*** (0.0820)	-0.410*** (0.0822)	-0.410*** (0.0822)
COHORT: 18-29								0.464** (0.0665)	0.121* (0.0703)	0.1105 (0.0700)	0.122* (0.0705)	0.110 (0.0704)	0.157** (0.0719)	0.225*** (0.0708)	0.254*** (0.0741)	0.251*** (0.0740)	0.242*** (0.0740)	0.236*** (0.0742)
COHORT: 45-59								-0.0368 (0.0454)	-0.0677 (0.0467)	-0.0658 (0.0467)	-0.0724 (0.0465)	-0.0671 (0.0464)	-0.0542 (0.0469)	-0.0712 (0.0469)	-0.0814* (0.0491)	-0.0904* (0.0492)	-0.0779 (0.0490)	-0.0765 (0.0490)
COHORT: 60+								0.206*** (0.0615)	0.155** (0.0659)	0.160** (0.0660)	0.159** (0.0659)	0.161** (0.0658)	0.188*** (0.0664)	0.320*** (0.0681)	0.312*** (0.0721)	0.324*** (0.0728)	0.365*** (0.0733)	0.366*** (0.0733)
INMIG: Feeling German									0.178*** (0.0362)	0.182*** (0.0362)	0.253*** (0.0431)	0.260*** (0.0431)	0.248*** (0.0436)	0.248*** (0.0436)	0.265*** (0.0446)	0.266*** (0.0448)	0.269*** (0.0447)	0.267*** (0.0447)
CONT: Asia									0.768*** (0.210)	0.789*** (0.207)	0.789*** (0.207)	0.820*** (0.207)	1.297*** (0.187)	1.369*** (0.185)	1.378*** (0.185)	1.363*** (0.185)	1.363*** (0.185)	1.318*** (0.189)
CONT: Oceania									-0.0122 (0.400)	0.0743 (0.400)	0.0743 (0.400)	0.108 (0.399)	0.187 (0.399)	0.109 (0.399)	0.175 (0.405)	-0.0368 (0.437)	0.0504 (0.443)	0.0536 (0.442)
CONT: N. America									0.503*** (0.187)	0.549*** (0.187)	0.549*** (0.187)	0.546*** (0.186)	0.487*** (0.188)	0.519*** (0.181)	0.534*** (0.189)	0.526*** (0.191)	0.514*** (0.190)	0.516*** (0.190)
CONT: S. America									0.285 (0.295)	0.285 (0.294)	0.285 (0.294)	0.276 (0.294)	1.158*** (0.325)	1.102*** (0.323)	1.226*** (0.355)	1.234*** (0.356)	1.225*** (0.352)	1.224*** (0.350)
DEMO: German Citizenship									-0.159*** (0.0436)	-0.159*** (0.0436)	-0.159*** (0.0436)	-0.151*** (0.0443)	-0.183*** (0.0444)	-0.186*** (0.0442)	-0.203*** (0.0460)	-0.188*** (0.0465)	-0.200*** (0.0464)	-0.199*** (0.0464)
INMIG: Concerned about Xenophobia												-0.177*** (0.0408)	-0.185*** (0.0409)	-0.178*** (0.0408)	-0.168*** (0.0427)	-0.164*** (0.0429)	-0.177*** (0.0431)	-0.176*** (0.0431)
EDUC: Years of Education												0.0433*** (0.00726)	0.0433*** (0.00726)	0.0384*** (0.00727)	0.0341*** (0.00779)	0.0349*** (0.00783)	0.0340*** (0.00781)	0.0345*** (0.00784)
DEMO: Net Income (log)												0.0606*** (0.00815)	0.0606*** (0.00815)	0.0579*** (0.00862)	0.0579*** (0.00866)	0.0563*** (0.00866)	0.0652*** (0.00897)	0.0652*** (0.00897)
INMIG: Proficiency German																		
DEMO: Refugee																		
DEMO: Female																		
REL: Christian																		
REL: Muslim																		
Constant	7.058*** (0.0172)	7.374*** (0.0175)	7.427*** (0.0199)	7.577*** (0.0221)	6.951*** (0.0628)	6.952*** (0.0634)	7.010*** (0.0752)	6.932*** (0.0798)	6.900*** (0.0854)	6.891*** (0.0852)	6.907*** (0.0850)	7.027*** (0.0892)	6.581*** (0.120)	6.255*** (0.128)	6.281*** (0.144)	6.297*** (0.146)	6.189*** (0.149)	6.188*** (0.150)
Observations	26,214	26,168	25,147	21,599	23,703	23,540	23,445	23,445	20,955	20,955	20,955	20,912	20,518	20,518	18,578	18,776	18,776	18,776
r ² _a	0	0.115	0.127	0.146	0.159	0.169	0.176	0.177	0.178	0.179	0.180	0.183	0.185	0.191	0.195	0.195	0.197	0.197
r ²	0	0.115	0.127	0.146	0.159	0.169	0.176	0.178	0.178	0.180	0.181	0.183	0.185	0.191	0.195	0.195	0.197	0.197

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Figure 8: Age Cohort Satisfaction by Year

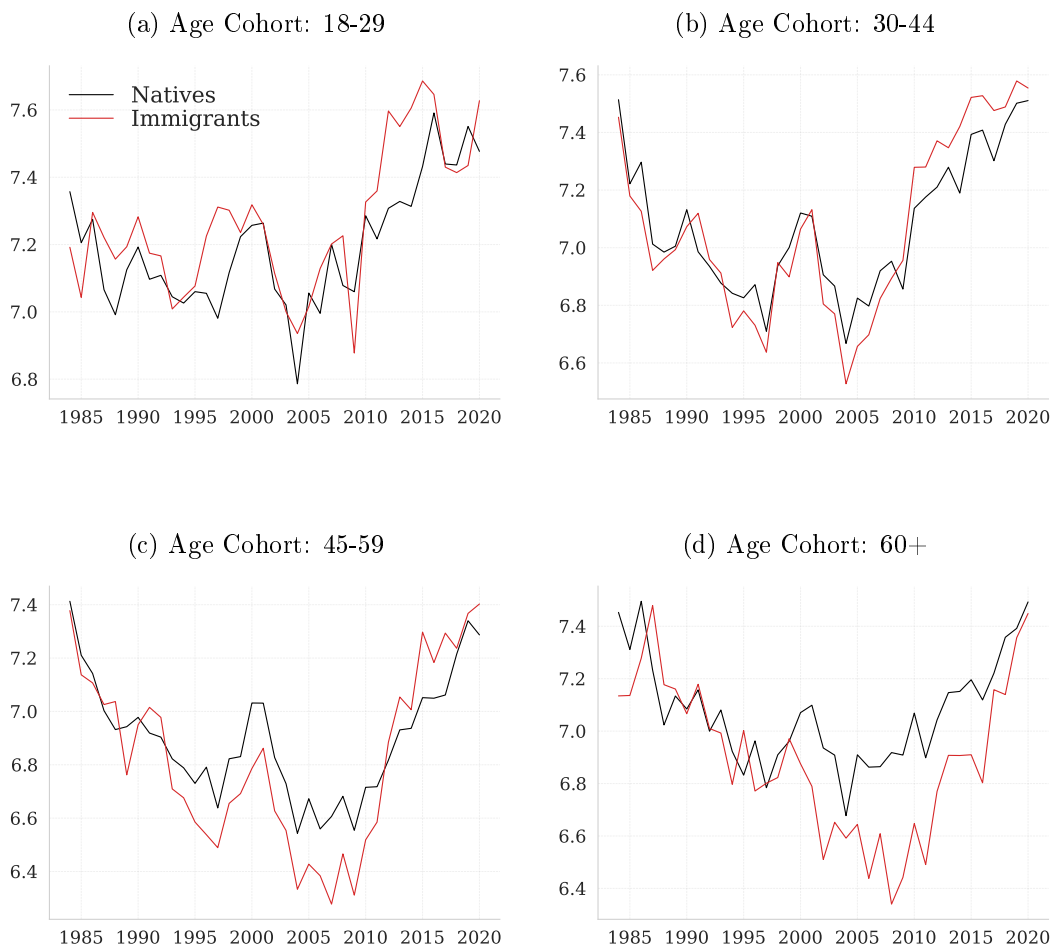
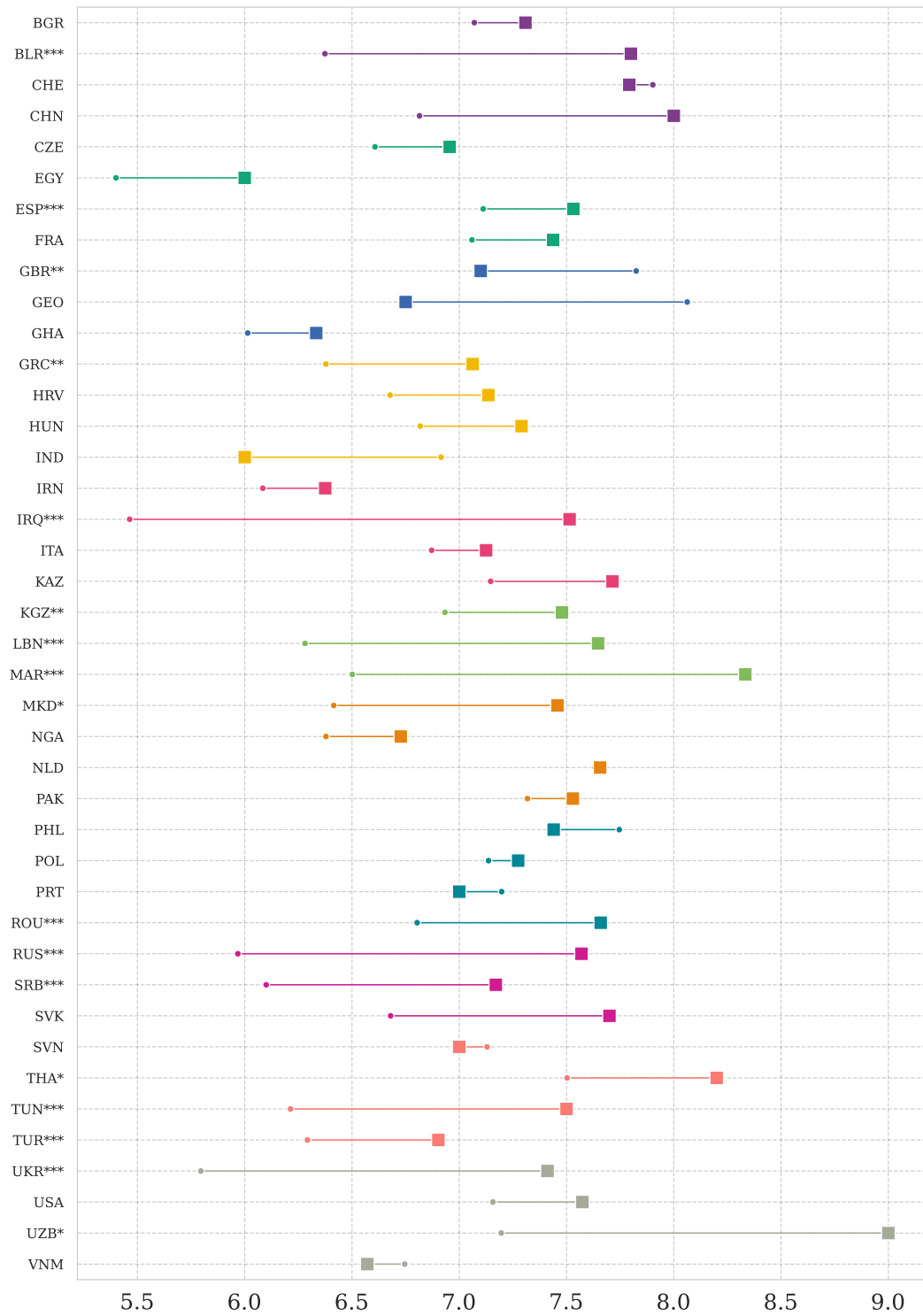


Figure 9: LS Difference to Peers in Origin Country (Matched)



*** p<0.01, ** p<0.05, * p<0.01

Table 8: Collinearity Diagnostics 1

Variable Squared	VIF	SQRT(VIF)	Tolerance	R -

bad_health	1.11	1.05	0.9025	
0.0975				
gen_vocation	1.08	1.04	0.9257	
0.0743				
gen_retired	2.41	1.55	0.4144	
0.5856				
gen_regunempl	1.42	1.19	0.7046	
0.2954				
discrimination	1.06	1.03	0.9453	
0.0547				
social	1.04	1.02	0.9612	
0.0388				
gen_wpartner	2.23	1.49	0.4477	
0.5523				
gen_seppart	1.28	1.13	0.7799	
0.2201				
gen_wid_div	1.93	1.39	0.5193	
0.4807				
cohort_18_29	1.42	1.19	0.7060	
0.2940				
cohort_45_59	1.31	1.15	0.7610	
0.2390				
cohort_60	2.53	1.59	0.3954	
0.6046				
feel_german	1.39	1.18	0.7179	
0.2821				
continent_Asia	1.02	1.01	0.9836	
0.0164				
continent_Oceania	1.01	1.00	0.9939	
0.0061				
continent_N_Amer.	1.01	1.01	0.9899	
0.0101				
continent_S_Amer.	1.01	1.00	0.9903	
0.0097				
german	1.41	1.19	0.7096	
0.2904				
xenophobia	1.02	1.01	0.9773	
0.0227				
edu_years	1.16	1.08	0.8593	
0.1407				
gen_income	1.99	1.41	0.5025	
0.4975				
lang_profic	1.06	1.03	0.9474	
0.0526				
refugee	1.01	1.01	0.9867	
0.0133				
rel_christ	1.02	1.01	0.9818	
0.0182				
rel_musl	1.01	1.00	0.9938	
0.0062				

Mean VIF	1.36			

Table 9: Collinearity Diagnostics 2

Cond	Eigenval	Index
1	8.6708	1.0000
2	1.8198	2.1828
3	1.2970	2.5855
4	1.1144	2.7894
5	1.0588	2.8617
6	1.0312	2.8997
7	1.0223	2.9123
8	1.0114	2.9280
9	0.9839	2.9687
10	0.9610	3.0038
11	0.9317	3.0507
12	0.9182	3.0729
13	0.8155	3.2608
14	0.7999	3.2924
15	0.7460	3.4092
16	0.6909	3.5427
17	0.6012	3.7976
18	0.4279	4.5018
19	0.2919	5.4505
20	0.2257	6.1979
21	0.2061	6.4865
22	0.1345	8.0304
23	0.1022	9.2105
24	0.0792	10.4653
25	0.0463	13.6882
26	0.0124	26.4583

Condition Number		26.4583
Eigenvalues \& Cond Index computed from scaled raw		
sscp (w/ intercept)		
Det(correlation matrix)		0.0365

Table 10: Breusch-Pagan/Cook-Weisberg Test

Assumption: Normal error terms
Variable: Fitted values of satisfaction

H0: Constant variance

chi2(1) = 1206.71
Prob > chi2 = 0.0000

Table 11: Hausman Test

Test of H0: Difference in coefficients not systematic

chi2(21) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 357.36
Prob > chi2 = 0.0000

Table 12: Table of Variables

Derived Variable	Base Variable	Description	Variable Type	Scale/Unit
bad_health	ple0008	Bad health	Dummy	1: Poor or bad health, 0 otherwise
	IVS: A009			
cohort	SOEP: -	Age cohorts	Categorical	Age: 18-29, 30-44, 45-59, 60+
	IVS: -			
	OECD: Age			
continent	corigin_iso	Continent	Categorical	-
corigin_iso	SOEP: -	ISO 3166-1 alpha-3 codes	Categorical	-
	IVS: alpha3_codenum			
	OECD: LOCATION			
corigin_str	corigin	Extracted country labels from Stata	Categorical	-
discrimination	plj0048_v1	Disadvantaged due to origins	Dummy	1: Yes, 0: No
	plj0048_v2			
dist_origin	corigin	Distance from origin country	Continuous	Kilometers
edu_years	pgbilzeit	Years of education	Ordinal	Years
feel_german	plj0078	Feeling German	Dummy	1: Yes, 0: No
gen_casmin	pgcasmin	CASMIN education level	Ordinal	Years of education
	IVS: X025			
gen_employed	pgemplst	Employment	Dummy	1: Yes, 0: No
gen_income (log)	pglabnet	Net income	Continuous	Euros
gen_notrain	pgiscd97	No qualifications	Dummy	1: Yes, 0: No

Continued from the previous page

Derived Variable	Base Variable	Description	Variable Type	Scale/Unit
gen_regunempl	pglfs	Registered unemployed	Dummy	1: Yes, 0: No
	IVS: X028			
gen_retired	pglfs	Retired	Dummy	1: Yes, 0: No
gen_seppart	pgfamstd	Not living with partner	Dummy	1: Yes, 0: No
gen_single	pgfamstd	Single	Dummy	1: Yes, 0: No
gen_tertiary	pgiscd97	Tertiary degree	Dummy	1: Yes, 0: No
gen_vocation	pglfs	Pursueing education/- training	Dummy	1: Yes, 0: No
gen_wid_div	pgfamstd	Widowed or divorced	Dummy	1: Yes, 0: No
gen_wpartner	pgfamstd	Living with partner	Dummy	1: Yes, 0: No
happy_work	plj0032	Happy at work	Dummy	1: Yes, 0: No
	IVS: X041			
imm_year	mib11	Year of immigration	Continuous	Years
	IVS: X047			
lang_bar	plf0033	Language barrier	Dummy	1: Yes, 0: No
nat_de	mpde	German nationality	Dummy	1: Yes, 0: No

Affirmation

I hereby declare that I have composed my Master's thesis "*Comparing Subjective Well-Being and its Predictors Between Immigrants of Heterogeneous National Origins: Evidence From German Panel Data*" independently using only those resources mentioned, and that I have as such identified all passages which I have taken from publications verbatim or in substance. I agree that the work will be reviewed using plagiarism testing software. Neither this paper, nor any extract of it, has been previously submitted to an examining authority, in this or a similar form.

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