

RESEARCH

Open Access



The well-being toll of revealed involuntary immobility: a quantitative study

Nicolás Caso^{1,2,3,4*} and Sorana Toma¹

Abstract

International migration is often driven by the desire to improve one's well-being. For many, moving abroad represents a pathway to better economic opportunities, social conditions, or personal safety. Yet, not all individuals who aspire to migrate are able to do so. Involuntary immobility—a condition in which people wish to migrate but are constrained by external barriers such as legal restrictions, financial limitations, or lack of resources—may pose a significant challenge to subjective well-being. This study quantitatively examines the association between revealed involuntary immobility and subjective well-being using original survey data from over 12,000 young adults across 25 communities in Asia and Africa. We estimate this relationship using multiple regression models that control for other determinants of well-being and demographic characteristics. To address potential confounding between determinants of involuntary immobility and subjective well-being, we implement Propensity Score Matching. Our findings show that individuals who have experienced failed migration preparations or attempts report between 3% and 7% lower levels of subjective well-being compared to their peers. These results provide the first large-scale quantitative evidence on the toll of unfulfilled migration aspirations. We highlight the need to consider the indirect well-being consequences of migration-restrictive policies and call for policies that support individuals' well-being in contexts of constrained mobility.

Keywords Migration, Involuntary immobility, Well-being, Life satisfaction, MIGNEX, Asia, Africa, Middle East

Introduction

While only about 4% of the global population, nearly 300 million people, reside outside their country of birth [1], the number of individuals who *wish* to migrate is far greater. According to Gallup's 2024 World Poll more than 900 million people, would permanently move to another

country if given the opportunity [2]. This proportion is even higher in certain regions, reaching 37% in sub-Saharan Africa, and 26% in the Middle East and North Africa. Despite this striking gap between migration aspirations and realized mobility, research has largely focused on those who do migrate, leaving the phenomenon of involuntary immobility, the condition in which individuals want to migrate but are unable to, critically underexplored.

This gap reflects what Schewel [3] describes as a “mobility bias” in migration research, an overemphasis on the experiences of those who move, while overlooking those who are constrained by various barriers. Similarly, a growing body of work examines the intersection of international migration and health, highlighting health-care access for migrants in transit [4] and the inequalities

*Correspondence:

Nicolás Caso

Nicolas.Caso@UGent.be

¹Department of Public Health and Primary Care, Ghent University, Corneel Heymanslaan 10, Gent 9000, Belgium

²Department of Economics, Ghent University, Sint-Pietersplein 5, Gent 9000, Belgium

³Peace Research Institute Oslo (PRIO), Hausmanns Gate 3, NO-0186, Oslo, Norway

⁴Comparative Regional Integration Studies, Potterierei 72, United Nations University, Bruges 8000, Belgium



© The Author(s) 2026. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

they face in destination countries [5–7], factors that often lead to a weathering of immigrants' initial health advantage [8, 9] and to poorer physical and mental health outcomes [10–12]. In contrast, the health and well-being implications of involuntary immobility remain largely absent from academic, media and policy discussions.

Being unable to fulfill one's migration aspirations—or feeling stuck in place—may have adverse effects on individuals' outlooks, behaviors, and mental health [13]. As Andersson and Siegel [14] argue, when individuals invest emotionally in the hope of leaving, they may disengage from local opportunities or underinvest in accumulating local skills (but see also contrasting evidence by [15]). Failing in one's attempt to migrate or being interrupted along the way—for example, by being (forcibly) repatriated—can lead to significant declines in subjective well-being. Yet, apart from a handful of case studies and ethnographic accounts [16–18], these dynamics have received little empirical attention.

Several factors challenge a systematic assessment of how involuntary immobility affects subjective well-being, which may explain the limited attention this topic has received. First, involuntary immobility, originally defined by Carling [19] as the condition of having migration aspirations but lacking the ability to realize them, is inherently difficult to operationalize. Second, quantitative data that enables the identification and measurement of this phenomenon is limited to non-existent. Third and beyond definitional and data limitations, additional methodological challenges complicate efforts to quantitatively assess the impact of involuntary immobility on subjective well-being – namely, confounding bias and reverse causality as often the determinants of migration aspirations coincide with those of lower well-being.

The aim of this study is to advance prior research on the involuntary immobility-subjective well-being nexus by providing the first quantitative assessment of their potential association. We tackle the three aforementioned challenges by drawing on the MIGNEX survey, a recent large-scale dataset comprising more than 12,000 respondents across 25 communities across Asia, Africa and the Middle East (Data section). This original dataset allows us to focus on failed migration preparations and failed migration attempts, to which we refer to as two forms of 'revealed' involuntary immobility (Data section). To address the potential confounding bias, we implement propensity score matching and include a broad set of potential confounders (Methods section). To mitigate concerns about reverse-causality—given that subjective well-being may also shape migration aspirations—we leverage the temporal sequence in the survey questions, where failed migration attempts precede well-being assessments by several years. Robustness checks are also

conducted to test for lingering concerns about reverse causality.

The remainder of this article is structured as follows. The next section ([Theoretical framework and empirical evidence](#)) introduces a theoretical framework linking involuntary immobility to lower subjective well-being, outlining the potential mechanisms behind this relationship and drawing on relevant qualitative evidence. We then describe the data (Data) used in the analysis and present our analytical strategy (Methods). Section "Results" reports and discusses the results, followed by a discussion and their broader implications. Finally, section "Results discussion" concludes the study and offers suggestions for future research.

Theoretical framework and empirical evidence **Involuntary immobility and subjective well-being: the evidence**

Only recently have researchers begun to treat immobility as a valid subject of study [3]. This emerging focus has drawn on and further developed key theoretical tools – most notably, the aspirations-(cap)abilities framework [19, 20], which conceptualizes migration as shaped by both the desire and the ability to move. While migration aspirations reflect the belief that leaving is better than staying [21, 22], abilities reflect one's capacity to act upon those beliefs [19, 20].

In some countries, for example Mexico [23], India [24], or Senegal [25], a 'culture of migration' promotes mobility as a marker of success. Yet, these same contexts face major restrictions on international movement—a contradiction known as the 'mobility paradox' [26]. Legal migration to the Global North has become increasingly difficult for low-income country nationals, as immigration policies tightened. Strong aspirations combined with rising barriers produce widespread involuntary immobility, especially in societies with long histories of emigration.

Despite the growing relevance of involuntary immobility across the globe, its role in shaping subjective well-being (SWB), typically defined as individuals' overall evaluation of their life satisfaction and emotional states [27], remains largely understudied. While studies have extensively examined how migration influences well-being [28–30], far less attention has been paid to the emotional and psychological consequences of being unable to migrate, particularly in contexts where migration is perceived as a key pathway to adulthood, respectability, or economic survival [31].

The limited empirical work that does exist comes primarily from qualitative and ethnographic studies. For instance, Conrad-Suso [32] documents widespread despair among young Gambian men who, unable to migrate, felt stigmatized as "lazy" or "cowardly." Many

withdrew from public life, spending their days idle in cafés—a condition locally described as the “nerves syndrome” [16, 33]. Similarly, Jónsson [34] describes Soninke youth in Mali as a “generation-in-waiting,” blocked from achieving adulthood through migration. A few other ethnographic studies in contexts such as Bangladesh [35–37] and Ghana [18] have similarly underscored the psychological toll of involuntary immobility. Relatedly, anthropological research on individuals whose migration journeys were forcibly interrupted, mainly through deportation back to their origin country, highlights post-return experiences of abandonment, distress, and disrupted psychosocial well-being [38, 39].

Involuntary immobility and subjective well-being: explanatory accounts

Existing research has highlighted multiple pathways through which involuntary immobility may contribute to diminished subjective well-being. First, some of the evidence outlined in the previous section aligns with what development economists have termed an “aspiration trap.” Ray [40] and Genicot and Ray [41] argue that when aspirations appear unattainable, individuals—particularly the poor—may fall into a trap of lowered motivation and stagnation. When the perceived aspiration gap—the discrepancy between what people hope to achieve and what they realistically can—becomes too wide, individuals may anticipate failure despite high effort. As a result, they often abandon their goals and adjust their aspirations downward [42]. This dynamic discourages forward-looking behavior and long-term investments, such as in education or skills, and fosters a sense of hopelessness and discouragement. Over time, it might lead to a self-reinforcing cycle of limited ambition and constrained opportunity [41–43].

Second, anthropological research highlights shame and social stigma as key pathways through which involuntary immobility and failed migration attempts harm individuals’ mental health. In West Africa, where migration is often equated with success, individuals who are unable to migrate may feel a deep sense of shame for not achieving what is considered a “respectable” adulthood [18]. These feelings of embarrassment and guilt are often intensified by fears of disappointing family expectations, as international migration is frequently embedded within broader household livelihood strategies [16, 18, 44]. Drawing on Goffman’s [45] concept of stigma, Schuster and Majidi [46] argue that in the context of Afghan deportees, families and communities often stigmatize those who challenge the idealized image of migration destinations as lands of opportunity, “preferring to believe only those who are lazy, stupid, or unlucky” [47] end up deported. Similarly, Kleist [48] shows how young Ghanaian men returning after failed migration efforts are stigmatized

as “failures” within their communities, with damaging effects on their sense of self-worth and mental health.

Third, experiences of involuntary immobility and failed migration attempts often result in social and emotional isolation, further undermining individuals’ mental well-being. Stigmatization and the shame it engenders frequently prompt those unable to realize their migration aspirations to withdraw from their social environments. In Senegal, for example, some youth interviewed by Debray et al. [31] reported avoiding friends and family by confining themselves to their rooms for long periods. Similarly, former players from a Ghanaian football academy studied by van der Meij et al. [18] chose not to return to their hometowns after unsuccessful attempts to launch international careers, fearing public judgment and disappointment. Those unable to adopt such avoidance tactics often reported feeling ostracized and harshly judged by peers and relatives [18]. This erosion of social support networks not only harms mental health directly but also eliminates important buffers against the broader psychological impacts of involuntary immobility.

Alternative explanations

While all pathways discussed above point to a negative impact of failed migration on subjective well-being, there are [at least] two plausible alternative explanations for such a negative impact.

First, other factors may influence both experiences of involuntary immobility and subjective well-being, what quantitative jargon refers to as unmeasured confounders or omitted variable bias. A key factor in this regard is individuals’ socio-economic position and, more broadly, the local availability of economic opportunities. Dissatisfaction with one’s economic situation and future prospects often fuels aspirations to migrate (whether internally or internationally), while simultaneously limiting the means to do so. At the same time, dissatisfaction with one’s job or overall socio-economic circumstances has been shown to negatively affect life satisfaction and subjective well-being [49–52]. Drawing on qualitative fieldwork with youth in Casamance, Senegal, Debray and colleagues [31] highlight how experiences of involuntary *social* immobility, the inability to attain their desired socio-economic status, can weigh more heavily on their well-being than *spatial* immobility. For many of these young people, it is their stalled life progression and failure to meet the material benchmarks of respectable adulthood that drive their (often ambivalent) migration aspirations, while also undermining their subjective well-being.

Second, a growing body of mainly quantitative research examines the reverse direction of causality, namely how subjective well-being (typically measured as life (dis)satisfaction) influences migration aspirations. Although these

studies do not directly address involuntary immobility or failed migration attempts, such experiences inherently involve (not yet fulfilled) migration aspirations. This literature finds a negative association between life satisfaction and the desire or intention to migrate, with consistent results across Latin America [53, 54], Europe [55], and globally [56–58]. In this literature, some authors stress that they do not expect a causal relationship, but instead see well-being as a more comprehensive proxy—compared to income—for unobserved factors influencing migration [56]. Notably, none of these studies consider the possibility of reverse causality, i.e. from unfulfilled migration aspirations to lower subjective well-being.

Contributions of this study

Our study expands the prior literature in three ways. First, it breaks new ground by quantitatively examining the implications of involuntary immobility for health, with a particular focus on subjective well-being. To the best of our knowledge, this is the first quantitative study to explore the relationship between involuntary immobility and SWB, a topic that has thus far received limited empirical attention.

Second, a central contribution of the paper lies in its operationalization of involuntary immobility. Although migration aspirations have been increasingly measured in recent years—albeit with varying definitions and limitations [59]—much less progress has been made in capturing the constraints or barriers that prevent people from acting on these aspirations. In other words, while we know more about who wants to migrate, we still lack ways to measure who *cannot*. One key challenge is identifying the point at which an aspiring migrant should be considered involuntarily immobile, rather than simply someone who has not yet acted on their migration plans. To address this gap, we propose the concept of ‘*revealed*’ *involuntary immobility*, which captures individuals who explicitly report that their migration preparations have failed or whose migration attempts were forcibly interrupted.

Third and a final notable contribution is the broader relevance and scope of our findings. While much prior research has focused on single countries or regions, the MIGNEX survey includes over 12,000 respondents across 25 communities in 10 countries spanning Africa, the Middle East, and Asia. This diversity enhances the generalizability of our findings beyond national or regional contexts.

Data

The MIGNEX dataset

We base our analyses on the MIGNEX survey dataset¹. This dataset is one of several publicly available outputs from the MIGNEX research project. The survey, although not explicitly designed to study involuntary immobility and subjective well-being, provides a rich dataset to analyse these dimensions quantitatively. To the best of our knowledge, it is the only publicly available dataset capturing measures of both involuntary immobility and subjective well-being. The survey was conducted in 26 communities (see Fig. 1) across Cabo Verde, Guinea, Ghana, Nigeria, Tunisia, Ethiopia, Somalia, Turkey, Afghanistan, and Pakistan². The selected communities reflect diverse development and migration contexts, including varying levels of infrastructure, economic opportunities, and security conditions. Each community had a population between 3000 and 200,000 at the moment of the survey³.

The survey involved 500 face-to-face 45-minutes interviews in each community with young adults aged 18 to 39, without further selection criteria beyond age. Some participants had migration experience, while others had not, including former and return migrants but excluding those who had permanently left. A three-stage probability-proportional-to-size (PPS) cluster sampling strategy with systematic random walks ensured representativeness of the target population. Data collection occurred between October 2020 and February 2022⁴, resulting in a pooled dataset of approximately 12,000 young adults that became publicly available for analyses late 2024⁵. According to the survey data collection documentation⁶, data collection faced logistical challenges due to the Covid-19 pandemic resulting in an overall delay of the fieldwork plan but not affecting the targeted response and completion rates. As detailed on the survey data collection documentation⁷, overall, respondent consent rates were high across all countries (above 96%). The main reason for non-consent was refusal to participate, though in some cases the refusal came from another household

¹ <https://www.mignex.org/>. A detailed discussion of the survey’s implementation, data cleaning and preparation can be found in the publicly available documentation from the project, available on <https://www.mignex.org/d032>

² Kombolcha (Ethiopia) is excluded from the analysis because survey data collection was halted prematurely for security reasons.

³ <https://www.mignex.org/our-research/research-areas>

⁴ As data collection took part during the Covid-19 outbreak, we include a Covid-19 exposure control in all our analyses to account for its effect on overall well-being.

⁵ <https://zenodo.org/records/13991767>

⁶ See section 10.7.6 in the survey data collection documentation available in <https://www.mignex.org/d032>, page 21

⁷ See section 10.7.6 in the survey data collection documentation available in <https://www.mignex.org/d032>, page 21



Fig. 1 MIGNEX research areas. Source: MIGNEX – <http://www.mignex.org>

member rather than the selected respondent. To reach the final sample of 12,973 respondents, a total of 15,795 households were visited. Reasons for non-interviews varied by country, but the most common was the absence of a household member within the target age group (18–39 years). This was negligible in Pakistan, where less than 1% of households lacked eligible members, but significant in Cabo Verde (27%), Tunisia (30%), and Turkey (24%). Field teams attributed this largely to high levels of out-migration from certain areas. Given the relatively high share of visited households without eligible respondents in some countries, this factor was accounted for in the weighting used for the analyses (see Methods section).

While response rates were not affected by the COVID-19 pandemic, the period created unusual conditions that may have shaped how respondents assessed migration constraints and life satisfaction. Border closures and visa suspensions increased immobility and might have made migration appear less feasible, potentially leading to more “failed preparations.” At the same time, the lockdown-induced economic shocks were likely to reduce well-being independently of migration restrictions. Health risks, uncertainty and weakened social networks may also have shifted priorities toward safety and family proximity, therefore reducing international migration aspirations. Although we control for COVID-related

health effects in all specifications, we acknowledge that this is a possible source of bias in the reported levels of migration aspirations, preparations, attempts and overall subjective well-being.

It should be noted that despite being representative of 18–39-year-olds in each of the 25 communities, the pooled dataset aggregates varied communities across three regions rather than representing a defined population. The data collection followed a detailed ethical approval procedure (for more information, see Ethical approval).

Dependent variable: subjective well-being

We focus our analyses on the cognitive dimension of subjective well-being, measured through the Satisfaction With Life Scale (SWLS)⁸ as asked in the MIGNEX survey: “All things considered, how satisfied are you with your life as a whole these days?” Responses ranged from 1 (“completely dissatisfied”) to 10 (“completely satisfied”), with options to answer “Don’t know” or “Refuse to answer.” Since its introduction in 1985, the SWLS [60] has been widely used across social sciences to operationalize subjective well-being due to its breadth and validity

⁸Item B17 in the Mignex survey, for more see <https://www.mignex.org/d032>

[61]. While subjective well-being is a multidimensional construct encompassing both cognitive (evaluative) and affective (emotional) components, the SWLS captures the cognitive aspect by reflecting individuals' evaluative judgments of their lives. The SWLS offers a holistic measure that incorporates economic, social, and personal dimensions [61], reflecting the cumulative impact of life experiences [62]. Moreover, its standardized format ensures comparability and consistency in data collection [63] making it well suited for a cross-community analysis such as ours

Independent variable: revealed involuntary immobility

In this study, we focus on *revealed* involuntary immobility, which we define as self-reported experiences of individuals who (i) prepared or (ii) attempted to migrate internationally but were ultimately unable to do so. We deliberately center our analysis on these revealed experiences, rather than constructing a migration ability index for each respondent or relying solely on their stated migration aspirations. This approach allows us to avoid making assumptions about respondents' capacities or constraints and instead grounds our analysis in individuals' own reported outcomes, as captured in the MIGNEX survey. We propose two different ways of operationalizing *revealed* involuntary immobility: (i) failed migration preparations and (ii) failed migration attempts.

Failed migration preparations

We operationalize a failed migration preparation drawing from the survey question (C10): "*In the past five years, have you ever prepared to move to another country, but not been able to go?*" Respondents could answer "Yes," "No," "Don't know," or "Refuse to answer." All participants were asked this question. We treat these responses as a binary variable indicating whether a respondent had prepared to migrate but failed to do so within the past five years.

While it is reasonable to expect that failed migration preparations would lower life satisfaction due to aspiration traps, shame and social stigma or social and emotional isolation (See [Theoretical framework and empirical evidence](#) section), the underlying reasons for these unfulfilled migration preparations are unknown based on the MIGNEX survey. There was no consequent question in the survey asking for this information. It could be that individuals decided to abandon their migration preparations due to unexpected career opportunities or family projects, which in turn may have affected positively their life satisfaction.

To better zoom in on failed migration preparations that were not a result of people abandoning their migration plans, we construct an additional variable that captures protracted migration aspirations following a failed

preparation. This binary variable takes a value of "1" if the respondent reported a failed migration preparation and still expresses a desire to leave within the next five years (based on survey item C3). If either condition is not met, the variable is assigned a value of "0." As shown in Table 1, failed migration preparations are vary widely across communities, 16% of the overall sample reported such experiences, with rates ranging from 3% in Yenice, Turkey, to 41% in Shahrake Jabrael, Afghanistan. In our analysis we refer to this dependent variable as *Failed migration preparation & still prefers to leave*.

Failed migration attempts

In addition to failed migration preparations, we include an additional measure of revealed involuntary immobility that captures more challenging or distressing experiences associated with it. In other words, we introduce a more "severe" measure of involuntary immobility, which we expect to have a stronger negative association with subjective well-being. We create a variable that captures whether a respondent declared having had a failed migration attempt. An attempt is a more concrete step in the migration process that can be assumed to follow a preparation. Following the MIGNEX survey questions we define that a respondent had a failed migration attempt if they (1) have been injured whilst on the way to move another country (item G06) or, (2) detained on the way to move to another country not reaching their final destination (item G08) or, (3) tried to move to one particular country but ended stuck in another country (item G09) or, (4) been deported from abroad (item G10). Failed migration experiences constitute rare (in frequency) experiences across the MIGNEX survey. While in Behsud, Afghanistan (AFG2), around 11% of the sample has had failed migration attempt, in some communities no one declared this incident, leading to only 2% of the whole sample having declared failed migration attempts (see Table 1). For our analyses we also construct a binary variable that captures whether a respondent had a failed migration attempt and still prefers to leave. In our analysis we refer to this dependent variable as *Failed migration attempt & still prefers to leave*.

Figure 2 illustrates the prevalence of failed migration preparations and attempts across the 25 communities, highlighting two key observations. First, as expected, there is a positive correlation between the frequency of failed preparations and failed migration attempts. In other words, the more preparations, the more attempts. Second, neither preparations nor attempts are widespread in the sample. In most communities, fewer than one in four respondents had prepared for international migration, and in some places only about one in ten had attempted and failed. This low incidence introduces

Table 1 Summary statistics for variables of interest

Variables	Mean	Standard deviation	Min	Max	Lowest mean	Highest mean
Dependent variable						
<i>Satisfaction with life as whole these days</i>	4.88	2.57	1	10	2.83	GIN2 6.60 SOM1
Independent variables (Revealed Involuntary Immobility)						
<i>Failed migration preparation</i>	0.16	0.37	0	1	0.03	TUR2 0.41 AFG1
<i>Failed mig. preparation & prefers to leave</i>	0.12	0.32	0	1	0.02	TUR2 0.29 TUN1
<i>Failed migration attempt</i>	0.02	0.15	0	1	0.00	* 0.11 AFG2
<i>Failed mig. attempt & prefers to leave</i>	0.01	0.11	0	1	0.00	* 0.10 AFG1
Controls: other determinants of life satisfaction						
<i>Very good or good self-assessed health</i>	0.75	0.43	0	1	0.47	GIN2 0.92 TUR2
<i>Years of completed education</i>	8.75	5.60	0	23	2.41	GIN2 12.79 NGA3
<i>Years of completed education (sq)</i>	107.84	92.40	0	529	26.48	GIN2 174.08 TUN2
<i>Perceived relative living standards</i>	4.42	2.06	1	10	3.39	PAK1 5.87 SOM1
<i>Perceived relative living standards (sq)</i>	23.75	19.87	1	100	14.46	NGA1 38.00 SOM1
<i>Satisfied with current occupation</i>	0.55	0.50	0	1	0.25	GHA3 0.92 PAK1
<i>Is unemployed</i>	0.20	0.40	0	1	0.02	PAK2 0.42 SOM1
<i>Thinks community is changing in good ways</i>	0.56	0.50	0	1	0.18	TUN2 0.86 ETH2
<i>Thinks most people in comm. can be trusted</i>	0.43	0.50	0	1	0.11	NGA3 0.75 TUR2
<i>Thinks religion is very important in life</i>	0.91	0.29	0	1	0.58	TUR1 1.00 AFG2
<i>Age</i>	27.25	6.50	18	39	25.26	NGA3 29.29 CPV2
<i>Is female</i>	0.53	0.50	0	1	0.34	PAK3 0.77 PAK1
<i>Linguistic minority status</i>	0.25	0.28	0	1	0	AFG3 0.71 GHA2
<i>Is married/cohabiting</i>	0.52	0.5	0	1	0.24	TUN2 0.90 GIN2
<i>Number of children</i>	0.52	0.5	0	1	0.22	NGA3 0.97 GIN2
<i>Affected by Covid</i>	5.15	1.78	0	1	1.54	PAK3 7.88 CPV2

Notes: Community acronyms are for Cape verde: CPV1 = São Nicolau, CPV2 = Boa Vista. Ginea: GIN1 = Boffa, GIN2 = Dialakoro. Ghana: GHA1 = Gbane, GHA2 = Golf City, GHA3 = New Takoradi. Nigeria: NGA1 = Down Quarters, NGA2 = Awe, NGA3 = Ekpoma. Ethiopia: ETH2 = Batu, ETH3 = Moyale. Somalia: SOM1 = Erigavo, SOM2 = Baidoa. Tunisia: TUN1 = Enfidha, TUN2 = Redeyef. Turkey: TUR1 = Hopa, TUR2 = Yenice, TUR3 = Kilis. Afghanistan: AFG1 = Shahrake Jabrael, AFG2 = Behsud, AFG3 = Shahrake Mahdia. Pakistan: PAK1 = Chot Dheeran, PAK2 = Youhanabad, PAK3 = Keti Bandar. *There are no recorded failed migration attempts in: NGA1, NGA2, SOM2, TUR1, TUR2 or PAK

Source: Elaborated by the authors

complexity into our empirical analysis, which we discuss later in our “Methods” section.

Control variables: other determinants and covariates of subjective well-being

Finally, and to fully assess the correlation and potential negative impact of involuntary immobility on subjective well-being we include a broad set of controls that have been shown in prior literature to affect SWB. The selection of controls or determinants of subjective well-being was done based on the intersection of previous quantitative literature and the data available from the MIGNEX survey. Table 3 in the appendix resumes all the determinants of subjective well-being that were included in our analyses alongside their expected association with subjective well-being taken from previous studies. Additionally, Table 1 presents summary statistics for all the controls included in our analyses⁹.

⁹As shown in Table 1, due to the time span of data collection, we include a variable controlling for whether the respondent was affected by Covid-19 in all estimations. Consistent with previous findings (see Table 3), this variable is negatively associated with life satisfaction.

Methods

To quantitatively assess the relationship between revealed involuntary immobility (failed migration preparations and failed migration attempts) and subjective well-being (life satisfaction), we rely on multivariate regression analyses and propensity score matching. We begin our empirical analysis by conducting linear regressions to examine the statistical association between failed migration preparations and attempts, on the one side, and life satisfaction, on the other. All regressions include community fixed effects to account for community-level factors that may influence this relationship, alongside the control variables and determinants of subjective well-being outlined in Table 3. To rule out multicollinearity, we analyze the correlation matrix among independent variables and assess the variance inflation factor (VIF) after the regressions. Except for the squared terms for education and perceived relative wealth, all variables have a VIF below 2.5, indicating no relevant collinearity concerns. Given the sampling strategy used in the MIGNEX survey, we implement sampling weights in all regressions using the `svyset` command in Stata. By default, applying the `svy` prefix ensures that standard errors are robust to

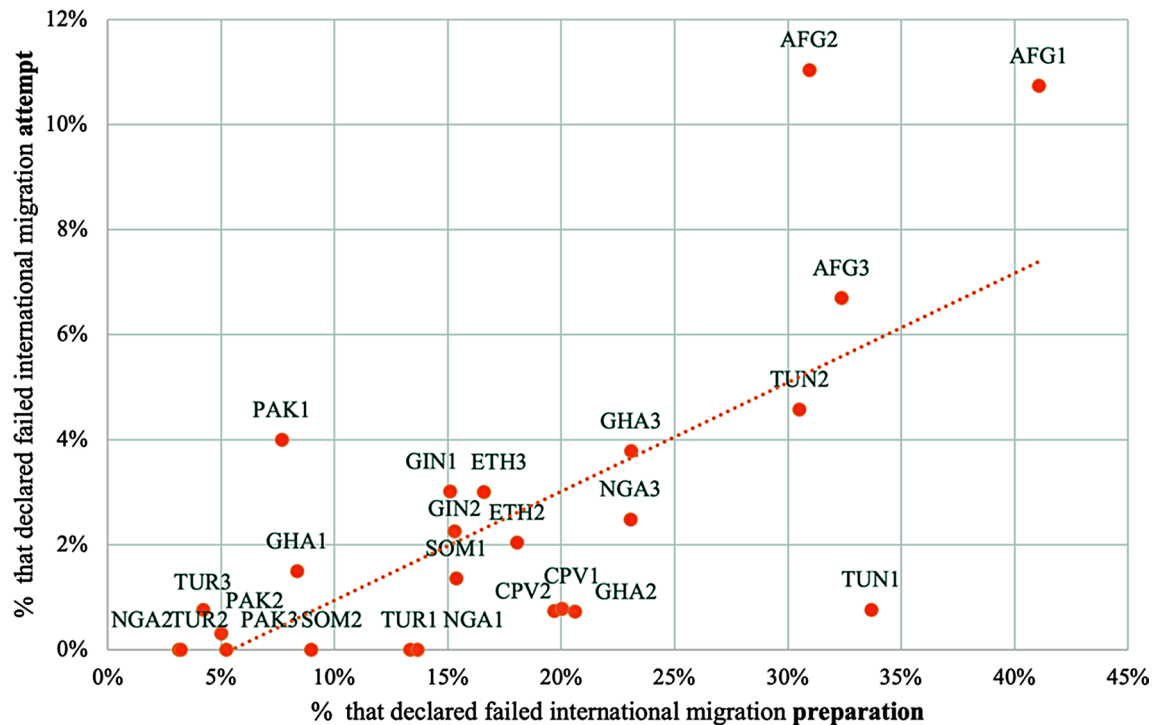


Fig. 2 Levels of failed migration preparations and failed migration attempts across the different communities. Data are weighted to reflect the survey design. Source: elaborated by the authors

heteroscedasticity. However, from this suggested empirical strategy, three key methodological challenges arise.

First and as shown Table 1 and Fig. 2, both failed migration preparations and attempts are uncommon across all communities. The limited number of respondents that have declared failed preparations in some communities obliges us to run all our analyses with the pooled dataset and not community by community. While this allows us to draw general conclusions from this very diverse dataset, we cannot do inferential statistics for each community which limits the scope our analyses. In particular, sub-group analyses (e.g. gender-specific) analyses were hindered by limited sample sizes (approximately 150 respondents per group), reducing statistical power and limiting the precision of estimated treatment effects.

Second, prior research also suggests that several of the determinants of life satisfaction can also influence migration aspirations (and therefore preparations and/or attempts), introducing a potential confounding variables issue. The presence of confounding variables can result in spurious relationships between failed migration preparations or attempts and life satisfaction. To address the risk of spurious associations caused by confounding variables, we employ propensity score matching (PSM). This method reduces bias by matching simulated “treated” and “control” groups based on their likelihood of experiencing failed migration preparations or attempts, conditional on the observed covariates. In other words, we

compare respondents who reported failed migration experiences with those who did not but who share similar characteristics across the 14 determinants of subjective well-being presented in Table 3. PSM¹⁰ balances these groups, mimicking a randomized experimental design and minimizing confounding effects. We implement PSM with various specifications for the number of matched neighbors and conduct subsample analyses to ensure the robustness of our findings.

Third, as discussed in our literature review, previous research has identified significant links between life dissatisfaction (or low subjective well-being) and migration aspirations. This poses a potential reverse causality risk for our empirical estimation that our empirical strategy cannot fully rule out. Even though we rely on *retrospective* experiences of revealed involuntary immobility and examine their association with *current* levels of subjective well-being, the temporal ordering of this relationship remains uncertain. In other words, we cannot determine if respondents that report revealed involuntary immobility were already less satisfied with their lives prior to this experience. While propensity score matching allows

¹⁰To implement Propensity Score Matching we employ Stata’s inbuilt ‘teffects psmatch’ command, which calculates propensity scores, matches treated and control units, and estimates the treatment effect while minimizing bias. In addition, we also use the user-written ‘psmatch2’ package to estimate propensity scores. Both methods yield similar results, even when varying the number of neighbors each observation is matched to.

us to compare their current life satisfaction with that of otherwise similar individuals who did not prepare for or attempt migration, these estimated effects should be interpreted with caution and mainly as associations rather than causal effects.

Results

As outlined in our empirical strategy we start by assessing the strength of the association between failed migration preparations or attempts and life satisfaction by means of regression analyses. For each independent variable of interest (failed preparation, failed preparation & still preferring to leave, failed attempt and failed attempt & still preferring to leave) we run three regressions (a simple regression, then adding the 14 controls from Table 3, and then adding also community fixed effects). The above leads to 12 coefficients of interest that are presented in Fig. 3. The full tables with the regression coefficients for all variables and specifications are available in appendix Tables 4 and 5.

We start by looking at the association of failed migration preparations with life satisfaction (markers 1 to 3) and find no statistically significant relationship. However, when we consider individuals who experienced failed migration preparations and still hold international migration aspirations (markers 4 to 6), we observe a coefficient of -0.14 , statistically significant at a 90% confidence level, after including controls and community fixed

effects (marker 6). This indicates a weak and relatively small association between a failed migration preparation and life satisfaction for those respondents that would still prefer to leave the country. Given that life satisfaction is measured on a 1-to-10 scale, this corresponds to a 1.56% associated decrease in life satisfaction $[(0.14/9)*100]$ when a respondent experienced a failed migration preparation and still prefers to leave. While statistically significant at the 10% level, the coefficient size is also relatively small.

Next, we estimate the association of failed migration attempts (a step further after preparations) with life satisfaction, which we hypothesize will have a stronger negative impact on subjective well-being. As shown in Fig. 3, the coefficients are of -0.40 for respondents who reported a failed migration attempt (marker 9) and of -0.50 for those who experienced a failed migration attempt and still hold international migration aspirations (marker 12). Both coefficients correspond to those for the regressions that include controls and community fixed effects. These coefficients correspond to 4.44% and 5.60% decreases in life satisfaction, respectively and are both larger in size and statistically significant in comparison to those of failed preparations.

While our findings are aligned with our expectations and indicate a mild but statistically significant association between failed migration preparations (only when international migration aspirations persist) and failed

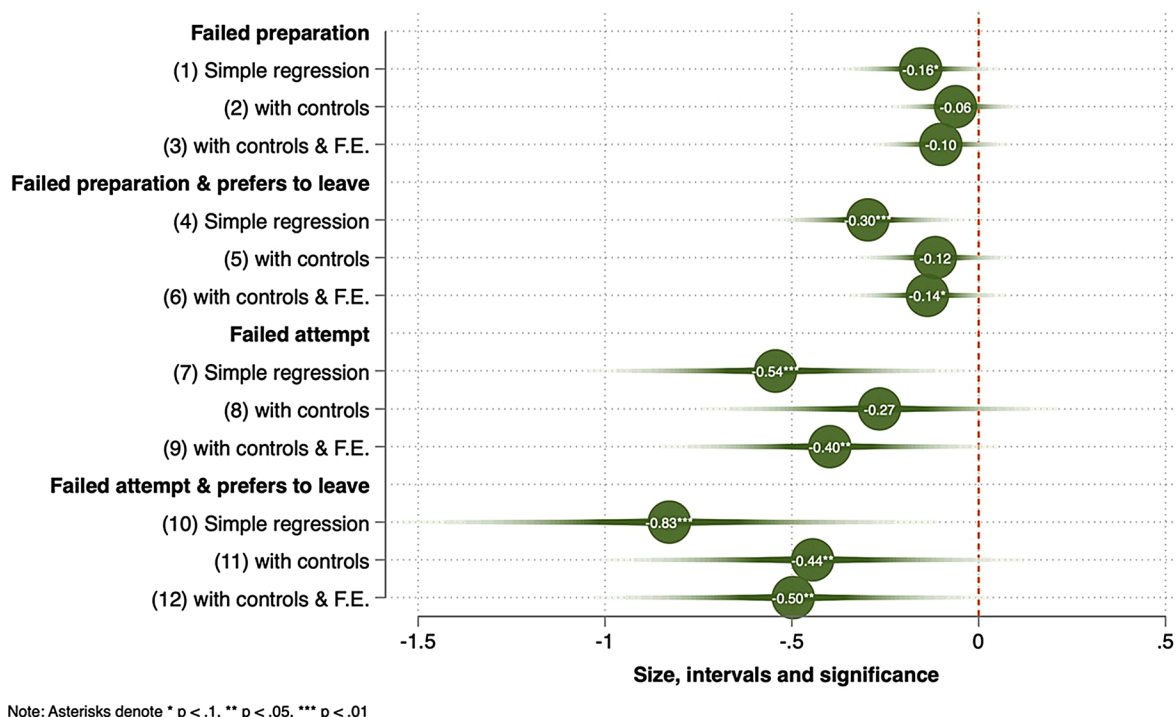


Fig. 3 Size, confidence intervals and statistical significance of coefficients for independent variables of interest across different model extensions. Source: elaborated by the authors

Table 2 Results for treatment variables after propensity score matching

"Treatment" (independent) variable		Matched neighbors	ATET	S.E.	Z	One-tailed test p> z
Failed preparations						
1	<i>Prepared and not able to go</i>	1	-0.18**	0.09	-2.03	0.02
2	<i>Prepared and not able to go</i>	2	-0.12*	0.07	-1.59	0.06
3	<i>Prepared and not able to go</i>	3	-0.10*	0.07	-1.37	0.09
4	<i>Prepared, not able to go and prefers to leave</i>	1	-0.18**	0.1	-1.85	0.03
5	<i>Prepared, not able to go and prefers to leave</i>	2	-0.16**	0.08	-1.91	0.03
6	<i>Prepared, not able to go and prefers to leave</i>	3	-0.17**	0.08	-2.12	0.02
Failed migration attempts						
7	<i>Failed migration attempt</i>	1	-0.35**	0.21	-1.70	0.05
8	<i>Failed migration attempt</i>	2	-0.34**	0.19	-1.80	0.04
9	<i>Failed migration attempt</i>	3	-0.35**	0.17	-2.04	0.02
10	<i>Failed migration attempt and prefers to leave</i>	1	-0.62**	0.31	-2.03	0.02
11	<i>Failed migration attempt and prefers to leave</i>	2	-0.49**	0.25	-1.99	0.03
12	<i>Failed migration attempt and prefers to leave</i>	3	-0.31	0.25	-1.25	0.11

Notes: i) All PSM estimations were done using the same set of 14 controls as for the regressions (see Table 4)

ii) To assess the quality of the propensity, score matching procedure we compute the mean and variances of the treated and control groups alongside their standardized mean differences and variance ratios. As Table A4 in the appendix shows, the means and variances are very similar between the treated and control groups while the standardized mean differences are all close to 0 and all variance ratios are close to 1.

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

Source: Elaborated by the authors

migration attempts with subjective well-being, these linear estimates provide only limited insight into the direction and strength of these relationships. This is because they do not fully account for the potential confounding nature of the relationship between our independent and dependent variables. To address the issue of spurious correlations, we estimate the association of these two experiences (failed preparations and attempts) with subjective well-being by implementing Propensity Score Matching (PSM) to approximate a randomized experimental design.

For each independent variable we estimate the effects using up to three matched neighbors. The standard approach in estimating average treatment effects on the treated (ATET) involves comparing one treated individual (who experienced a failed migration preparation or attempt) with the most similar individual who did not, basing this similarity on all other covariates. To ensure robustness, we extend this comparison by matching each respondent who experienced a failed preparation or attempt with up to three similar individuals who did not report these experiences. The results for the twelve estimations are presented in Table 2. After applying propensity score matching, failed migration preparations emerge as statistically significant, correlating with a reduction in life satisfaction between 0.10 and 0.18 points. Failed migration attempts show a stronger negative association, with decreases in life satisfaction ranging from 0.27 to 0.62 points (-3.00% to -6.88%). These findings reinforce the notion that failed migration projects, particularly those with further progress in the migration process and associated with distressing experiences, negatively affect

subjective well-being. Such experiences are perceived as significant life setbacks, potentially shaping long-term perceptions of life satisfaction and personal achievement.

The inclusion of the proposed covariates in the construction of the propensity scores provides a reliable basis for comparing individuals with highly similar profiles, where the primary distinction lies in whether they had prepared for or attempted to migrate. The analysis reveals that individuals who reported failed preparations or attempts within five years prior to the survey tend to exhibit lower life satisfaction compared to those without such experiences. While most coefficients for revealed involuntary immobility are statistically significant, their magnitudes relative to other determinants of subjective well-being are modest. Compared to established drivers of life satisfaction, such as perceived relative living standards, health, and local prospects, failed migration preparations and attempts have a weaker association. For comparison purposes, Fig. 4 summarizes all covariates relative to the strongest coefficient identified: failed *migration attempt & still prefers to leave*. For instance, satisfaction with one's occupation shows twice the strength, and a one-point increase in perceived relative wealth fully offsets the negative effect of a failed migration attempt. Similarly, optimism about local community prospects counterbalances the adverse impact of failed migration attempts on subjective well-being. As discussed later, these relationships place our findings within the broader context of determinants of subjective well-being and suggest possible adaptation mechanisms to mitigate the negative impact of failed migration attempts. Several factors may explain the relatively weak

association between failed migration attempts and SWB in comparison to other determinants of SWB. First, the time elapsed between the failed migration attempt and the moment of the survey might have allowed respondents to adapt/change their aspirations or recover/cope from their failed experience, lessening the perceived impact of immobility. Second, individuals may adapt their aspirations or seek local opportunities, mitigating the effects of geographical immobility. This aligns with the idea that social rather than spatial immobility may be more consequential for well-being [31].

Results discussion

Contributions

To our knowledge, this is the first quantitative analysis to study the relationship between involuntary immobility and subjective well-being. By introducing a novel measure of *revealed* involuntary immobility, we contribute a new methodological and conceptual tool relevant to three fields of inquiry. First, we contribute to the literature on the relationship between mobility and subjective well-being [64] by putting focus on the reverse relationship and looking closely to those who do not manage to migrate. Secondly, our results also speak to the scarce literature on the developmental consequences of involuntary immobility [15] by shedding light on a hidden toll of it on subjective well-being. Third, our study contributes to broader research on the determinants of well-being [65] adding failed migration attempts as another driver of SWB even when accounting for other determinants found in prior literature.

Our findings also challenge previous research on the relationship between life dissatisfaction and migration aspirations [56–58]. We suggest an alternative possibility: that unfulfilled migration attempts may themselves diminish well-being.

Implications

Our results highlight the negative effects of restrictive migration policies implemented by sought-after destination countries, which limit the mobility of a large share of young people. These effects reflect a deeper structural inequality which has also been referred to as “the global mobility divide” [66]. Access to international mobility is profoundly unequal – citizenship, passport strength and visa regimes often give people born in high-income countries an easier, cheaper and quicker access to movement than those born in low or middle-income countries, in particular citizens from African countries [26, 67, 68]). In this sense, involuntary immobility should be understood not merely as a product of individual-level deficits, but as a consequence of structural barriers embedded in migration governance. These macro-level political arrangements channel opportunities and risks across

borders, producing a form of inherited mobility advantage for some and structural immobility for others [69]. Policymakers designing migration governance frameworks should consider the well-being toll of such restrictions when assessing both their effectiveness and broader social implications.

Our findings also point to a broader dynamic of inequality. A substantial literature shows that immigrants often arrive in destination countries with better health than native-born populations despite lower socio-economic status—a pattern known as the Healthy Immigrant Effect (HIE) [70, 71]. Yet this advantage tends to erode with time, as longer-settled immigrants exhibit health outcomes similar to or even worse than those of natives [8, 72, 73]. This deterioration, also described as the Immigrant Health Paradox [9], reflects the cumulative toll of structural barriers, discrimination, and socio-economic stressors that undermine initial resilience. Our results suggest a comparable dynamic in origin contexts: restrictive migration regimes and unequal access to mobility may also erode subjective well-being among those who aspire to migrate but cannot, mirroring the weathering processes observed in destination settings.

In addition to the above, our results stress the need for policy interventions that can buffer the negative effects of movement restrictions on well-being. Many of these interventions – carried out by NGOs, national governments and international development agencies – focus on promoting local livelihoods programmes and skills training, or by encouraging youth to return to or invest in agriculture and local enterprises (the so-called “back-to-the-land” or skills-training approach). These have been criticized for instrumentalizing development for achieving migration management goals [74, 75]. However, the empirical evidence on the effectiveness of such measures in reducing migration aspirations or averting the psychosocial harm of unmet mobility goals is mixed at best [76]. Evidence from West Africa and elsewhere shows that such approaches often underestimate the symbolic and relational dimensions of migration – including its role in achieving social recognition, adulthood, and dignity. In this light, policies addressing the well-being costs of constrained mobility must move beyond purely economic interventions. We support calls [77] to recognize the indirect well-being consequences of restrictive migration policies and argue that effective responses should also target the psychological, emotional and social dimensions of involuntary immobility. While enhancing local opportunities remains important, it is equally vital to offer accessible mental health and psychosocial support for young people experiencing frustration, shame, or perceived failure due to unmet (migration) aspirations. Such measures should be designed not to depoliticize the issue, but to acknowledge the structural inequalities that

create immobility in the first place. Ultimately, mitigating the well-being costs of involuntary immobility requires a dual approach: one that addresses the structural production of immobility through restrictive mobility regimes, and one that supports individuals in navigating its psychosocial consequences.

Building on our findings and limitations, we propose several avenues for future research. First, longitudinal studies tracking subjective well-being before and after experiences of failed migration would provide a more robust basis for causal inference and reduce concerns around reverse causality or endogeneity. Second, future work should explore the mechanisms through which involuntary immobility affects well-being. Specifically, unpacking the relative importance of spatial versus social immobility could deepen our understanding of which constraints matter most. Research examining quantitatively how family expectations, social or peer pressure, and unmet aspirations impact mental health would offer valuable insights for designing targeted support systems for youth who feel involuntarily immobile. A further direction involves exploring the effects of perceived immobility. While our study uses an observed binary measure of revealed involuntary immobility, directly asking individuals whether they feel involuntarily immobile may uncover discrepancies between perception and measurable constraints. This, alongside the use of non-binary variables that captures degrees of involuntary immobility will help bringing this body of work forward.

Conclusion

By focusing on those who wish to move but are unable to do so, this study sheds light on a neglected side of the migration–well-being nexus. Our findings indicate that the proposed forms of revealed involuntary immobility, namely, failed migration preparations and failed migration attempts, are negatively associated with the cognitive component of subjective well-being, measured as overall life satisfaction. Moreover, experiencing failed migration attempts and still aspiring to migrate abroad is associated with around 7% lower subjective well-being. This conclusion is supported by a combination of multivariate regression analyses and propensity score matching, aligning with insights from previous qualitative research. However, while the association between revealed involuntary immobility and subjective well-being is statistically significant, its strength is relatively weak compared to other well-established determinants of subjective well-being. Future research should further investigate this relationship, with particular attention to the underlying mediation mechanisms and the temporal dynamics involved.

Supplementary information

The online version contains supplementary material available at <https://doi.org/10.1186/s12992-026-01193-0>.

Supplementary Material 1

Acknowledgements

The authors thank Ilse Ruysen for her valuable comments and feedback on an earlier version of this manuscript.

Author contributions

N.C.: conceptualization (lead); data curation (lead); formal analysis (lead); investigation (lead); methodology (lead); project administration (lead); visualization; writing – original draft preparation (lead); writing – review & editing (lead). S.T.: conceptualization (equal); formal analysis (supporting); investigation (supporting); methodology (supporting); project administration (supporting); writing – original draft preparation (equal); writing – review & editing (equal).

Funding

This work was supported by the Flemish Science Foundation (FWO) grant number G098523N and the University Foundation of Belgium (Universitaire Stichting België). The analyses presented in this paper are based on the MIGNEX survey dataset. MIGNEX has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 770453.

Data availability

This research uses the non-anonymized version of the MIGNEX dataset. Due to confidentiality restrictions, access to this version is limited. A public, anonymized version with full documentation is available at: <https://zenodo.org/records/13991767>.

Declarations

Ethical approval

This study is based on the MIGNEX project survey data (<https://www.mignex.org/>). MIGNEX activities covered data collection and/or analysis in more than a dozen countries within and outside Europe. The primary institutional anchoring of research ethics and research integrity is with the Research Executive Agency of the European Commission. Since the project coordinator (Peace Research Institute of Oslo) is located in Norway, additional guidance and procedures for project-wide ethics and integrity issues are anchored with Norwegian institutions, notably the Norwegian Center for Research Data (NSD) and the Norwegian National Research Ethics Committees. The three main reference documents for research ethics and research integrity that were followed are: 1. Ethics in social science and humanities (European Commission DG RTD 2018). 2. The European Code of Conduct for Research Integrity (ALLEA 2017). 3. Guidelines for research ethics in the social sciences, humanities, law and theology (Norwegian National Research Ethics Committees 2016). The survey data collection involved research with human participants. The MIGNEX Grant Agreement (EU Horizon 2020) contains specific commitments relating to informed consent and vulnerable individuals. These are all outlined and available here: <https://www.mignex.org/publications/4-research-ethics-and-research-integrity>.

Informed consent

Informed consent was obtained and documented for the totality of the survey participants. Requirements for informed consent were covered aligned with the relevant legislation (European Parliament 2016), data protection principles (Norwegian Centre for Research Data 2018) and ethics guidelines (Norwegian National Research Ethics Committees 2016) and reflected the specific context at hand. Within MIGNEX, a separate consent form and an accompanying information sheet are prepared for the following categories of participants. A detailed description of the survey data collection and the standards can be found here: <https://www.mignex.org/publications/7-survey-data-collection>. The informed consent sheet is available in this document in page 174. How informed consent was recorded is available in pages 89 to 90.

Competing interests

The authors declare no competing interests.

Received: 19 May 2025 / Accepted: 29 January 2026

Published online: 14 February 2026

References

1. International Organization for Migration. World migration report 2024. Geneva: United Nations; 2024.
2. Ray J, Pugliese A. Desire to migrate remains at record high. 2024. <https://new.gallup.com/poll/652748/desire-migrate-remains-record-high.aspx>.
3. Schewel K. Understanding immobility: moving beyond the mobility bias in migration Studies. *Int Migr Rev.* 2020;54(2):328–55. <https://doi.org/10.1177/0197918319831952>.
4. Canova C, Dansero L, Destefanis C, Benna C, Rosato I. Assessing the health status of migrants upon arrival in Europe: a systematic review of the adverse impact of migration journeys. *Global Health.* 2024;20(1):69. <https://doi.org/10.1186/s12992-024-01075-3>.
5. Markkula N, Cabieses B, Lehti V, Uphoff E, Astorga S, Stutzin F. Use of health services among international migrant children - a systematic review. *Global Health.* 2018;14(1):52. <https://doi.org/10.1186/s12992-018-0370-9>.
6. Moezzi SMI, Etemadi M, Lankarani KB, Behzadifar M, Katebzada H, Shahabi S. Barriers and facilitators to primary healthcare utilization among immigrants and refugees of low and middle-income countries: a scoping review. *Global Health.* 2024;20(1):75. <https://doi.org/10.1186/s12992-024-01079-z>.
7. Mougénot B, Amaya E, Mezones-Holguin E, Rodríguez-Morales AJ, Cabieses B. Immigration, perceived discrimination and mental health: evidence from Venezuelan population living in Peru. *Global Health.* 2021;17(1):8. <https://doi.org/10.1186/s12992-020-00655-3>.
8. Riosmena F, Everett BG, Rogers RG, Dennis JA. Negative acculturation and nothing more? Cumulative disadvantage and Mortality during the immigrant adaptation process among latinos in the United States. *Int Migr Rev.* 2015;49(2):443–78. <https://doi.org/10.1111/imre.12102>.
9. Ferrara A, Grindel C, Brunori C. A longitudinal perspective to migrant health: unpacking the immigrant health paradox in Germany. *Soc Sci Med.* 2024;351:116976. <https://doi.org/10.1016/j.socscimed.2024.116976>.
10. Kumar GS, Beeler JA, Seagle EE, Jentes ES. Long-term physical health outcomes of resettled refugee populations in the United States: a scoping review. *J Immigr Minor Health.* 2021;23(4):813–23. <https://doi.org/10.1007/s10903-021-01146-2>.
11. Mason J, Laporte A, McDonald JT, Kurdyak P, Fosse E, de Oliveira C. Assessing the “healthy immigrant effect” in mental health: intra- and inter-cohort trends in mood and/or anxiety disorders. *Soc Sci Med.* 2024;340:116367. <https://doi.org/10.1016/j.socscimed.2023.116367>.
12. Farwin A, Low A, Howard N, Yi H. “My young life, finished already?": a qualitative study of embedded social stressors and their effects on mental health of low-wage male migrant workers in Singapore. *Globalization Health.* 2023;19(1):47. <https://doi.org/10.1186/s12992-023-00946-5>.
13. Hage G. Waiting out the Crisis: on Stuckedness and Governmentality. In: *Waiting out the crisis: on stuckedness and governmentality.* Melbourne University Press; 2009. p. 1–12. <https://doi.org/10.3316/informit.077538461209525>.
14. Andersson L, Siegel M. Empirical assessments of the development impacts of migration. Published online 2019.
15. Carling J, Czaika M, Vargas-Silva C, Siegel M. Effects of involuntary immobility on development. Published online 2024.
16. Conrad Suso CT. Involuntary immobility and the unfulfilled rite of passage: implications for migration Management in the Gambia, West Africa. *Int Migr.* 2020;58(4):184–94. <https://doi.org/10.1111/imig.12675>.
17. Czaika M, Voithknecht M. Migration and aspirations - are migrants trapped on a hedonic treadmill? *IZA J Migr.* 2014;3(1):1. <https://doi.org/10.1186/2193-9039-3-1>.
18. Van der Meij N, Darby P, Liston K. “The downfall of a man is not the end of his life”: navigating involuntary immobility in Ghanaian football. *Sociol Sport J.* 2017;34(2):183–94. <https://doi.org/10.1123/ssj.2016-0101>.
19. Carling J. Migration in the age of involuntary immobility: theoretical reflections and Cape Verdean experiences. *J Ethnic Migr Stud.* 2002;28(1):5–42. <https://doi.org/10.1080/13691830120103912>.
20. De Haas H. Migration and Development: a theoretical perspective. *Int Migr Rev.* 2010;44(1):227–64. <https://doi.org/10.1111/j.1747-7379.2009.00804.x>.
21. Carling J. Why do people migrate? Fresh takes on the foundational question of migration Studies. *Int Migr Rev.* 2024;58(4):1757–91. <https://doi.org/10.1177/01979183241269445>.
22. de Haas H. A theory of migration: the aspirations-capabilities framework. *Comp Migr Stud.* 2021;9(1):8. <https://doi.org/10.1186/s40878-020-00210-4>.
23. Kandel W, Massey DS. The culture of Mexican migration: a theoretical and empirical analysis. *Soc Forces.* 2002;80(3):981–1004. <https://doi.org/10.1353/sof.2002.0009>.
24. Andrews R. Quitting India: the Anglo-Indian culture of migration. *Sites: J Soc Anthropol Cult Stud.* 2007;4(2):32–56. <https://doi.org/10.11157/sites-vol4iss21d73>.
25. Mondain N, Diagne A. Discerning the reality of ‘those left behind’ in Contemporary migration processes in sub-Saharan Africa: some theoretical reflections in the light of data from Senegal. *J Interact Stud.* 2013;34(5):503–16. <https://doi.org/10.1080/07256868.2013.827831>.
26. Kleist N, Thorsen D. Hope and uncertainty in Contemporary African migration. Routledge; 2017.
27. Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: three decades of progress. Published online 1999.
28. Wright K. Constructing migrant wellbeing: an exploration of life satisfaction amongst Peruvian migrants in London. *J Ethnic Migr Stud.* 2011;37(9):1459–75. <https://doi.org/10.1080/1369183X.2011.623621>.
29. Spitzer DL, Thambiah S, Wong YL, Kaundan MK. Globalization and the health and well-being of migrant domestic workers in Malaysia. *Globalization Health.* 2023;19(1):29. <https://doi.org/10.1186/s12992-023-00925-w>.
30. Wood N, Martin D. “I’m a foreigner there”: landscape, wellbeing and the geographies of home. *Health Place.* 2020;62:102274. <https://doi.org/10.1016/j.healthplace.2019.102274>.
31. Debray A, Petit V, Ruysen I, Sow N, Toma S. Well-being amid (im)mobility struggles: Youth’s experiences in Casamance, Senegal. *BMC Public Health.* 2024;24(1):2241. <https://doi.org/10.1186/s12889-024-19702-4>.
32. Conrad Suso CT. Backway or bust: causes and consequences of Gambian irregular migration. *J Mod Afr Stud.* 2019;57(1):111–35. <https://doi.org/10.1017/S0022278X18000666>.
33. Gaibazzi P. Bush Bound: young men and rural permanence in migrant West Africa. Berghahn Books; 2015.
34. Jónsson G. Migration aspirations and immobility in a Malian Soninke village. Published online 2008.
35. Ayebe-Karlsson S. ‘I do not like her going to the shelter’: stories on gendered disaster (im)mobility and wellbeing loss in coastal Bangladesh. *Int J Disaster Risk Reduct.* 2020;50:101904. <https://doi.org/10.1016/j.ijdrr.2020.101904>.
36. Ayebe-Karlsson S. When the disaster strikes: Gendered (im)mobility in Bangladesh. *Clim Risk Manag.* 2020;29:100237. <https://doi.org/10.1016/j.crm.2020.10237>.
37. Ayebe-Karlsson S, Kniveton D, Cannon T. Trapped in the prison of the mind: notions of climate-induced (im)mobility decision-making and wellbeing from an urban informal settlement in Bangladesh. *Palgrave Commun.* 2020;6(1):62. <https://doi.org/10.1057/s41599-020-0443-2>.
38. Khosravi S. After Deportation: ethnographic perspectives. Springer International Publishing; 2017.
39. Vathi Z, King R, eds. Return migration and psychosocial wellbeing: discourses, Policy-making and outcomes for migrants and their families. Routledge; 2017. <https://doi.org/10.4324/9781315619613>.
40. Ray D. Aspirations, Poverty, and economic change. In: Banerjee AV, Bénabou R, Mookherjee D, editors. *Understanding poverty.* Oxford University Press; 2006. p. 0. <https://doi.org/10.1093/0195305191.003.0028>.
41. Genicot G, Ray D. Aspirations and inequality. *Econometrica.* 2017;85(2):489–519. <https://doi.org/10.3982/ECTA13865>.
42. La Ferrara E. Presidential address: aspirations, social norms, and development. *J Eur Econ Assoc.* 2019;17(6):1687–722. <https://doi.org/10.1093/jeaa/jvz057>.
43. Dalton PS, Ghosal S, Mani A. Poverty and aspirations failure. *The Econ J.* 2016;126(590):165–88. <https://doi.org/10.1111/econj.12210>.
44. Conrad Suso CT. Totally napse: aspirations of mobility in Essau, the Gambia. *Third World Q.* 2022;43(8):1915–31. <https://doi.org/10.1080/01436597.2022.2074827>.
45. Goffman E. Stigma: notes on the Management of spoiled identity. Touchstone; 1963.
46. Schuster L, Majidi N. Deportation stigma and Re-migration. *J Ethnic Migr Stud.* 2015;41(4):635–52. <https://doi.org/10.1080/1369183X.2014.957174>.
47. Alpes MJ. Bushfalling at all cost: the economy of migratory knowledge in anglophone Cameroon. *Afr Diaspora: J Transatl Africa Global World.*

2012;5(1):90–115. <https://www.africabib.org/rec.php?RID=364408138>. Accessed May 6, 2025.

48. Kleist N. Trajectories of involuntary return migration to Ghana: forced relocation processes and post-return life. *Geoforum*. 2020;116:272–81. <https://doi.org/10.1016/j.geoforum.2017.12.005>.
49. Bonini AN. Cross-National variation in Individual life satisfaction: effects of National wealth, Human Development, and environmental conditions. *Soc Indic Res*. 2008;87(2):223–36. <https://doi.org/10.1007/s11205-007-9167-6>.
50. Heller D, Judge TA, Watson D. The confounding role of personality and trait affectivity in the relationship between job and life satisfaction. *J Organ Behav*. 2002;23(7):815–35. <https://doi.org/10.1002/job.168>.
51. Ng W, Diener E. What matters to the rich and the poor? Subjective well-being, financial satisfaction, and postmaterialist needs across the world. *J Personality Soc Psychol*. 2014;107(2):326–38. <https://doi.org/10.1037/a0036856>.
52. Unanue W, Gómez ME, Cortez D, Oyanedel JC, Mendiburo-Seguel A. Revisiting the link between job satisfaction and life satisfaction: the role of Basic psychological needs. *Front Psychol*. 2017;8:680. <https://doi.org/10.3389/fpsyg.2017.00680>.
53. Chindarkar N. Gender and climate change-induced migration: proposing a framework for analysis. *Environ Res Lett*. 2012;7(2):025601. <https://doi.org/10.1088/1748-9326/7/2/025601>.
54. Graham C, Markowitz J. Aspirations and Happiness of potential Latin American immigrants. Published online 2011.
55. Otrachshenko V, Popova O. Life (dis)satisfaction and the intention to migrate: evidence from central and Eastern Europe. *J Socio-Econ*. 2014;48:40–49. <https://doi.org/10.1016/j.socsc.2013.09.008>.
56. Cai R, Esipova N, Oppenheimer M, Feng S. International migration desires related to subjective well-being. *IZA J Migr*. 2014;3(1):8. <https://doi.org/10.1186/2193-9039-3-8>.
57. Caso N. Migration and alternative responses to dissatisfaction. Published online 2023.
58. Migali S, Scipioni M. Who's about to leave? A Global survey of aspirations and intentions to migrate. *Int Migr*. 2019;57(5):181–200. <https://doi.org/10.1111/mig.12617>.
59. Carling J, Schewel K. Revisiting aspiration and ability in international migration. *J Ethnic Migr Stud*. 2018;44(6):945–63. <https://doi.org/10.1080/1369183X.2017.1384146>.
60. Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life Scale. *J Pers Assess*. 1985;49(1):71–75. https://doi.org/10.1207/s15327752jpa4901_13.
61. Pavot W, Diener E. The satisfaction with life Scale and the emerging construct of life satisfaction. *The J Posit Psychol*. 2008;3(2):137–52. <https://doi.org/10.1080/17439760701756946>.
62. Diener E. Subjective well-being: the science of happiness and a proposal for a national index. *Am Psychologist*. 2000;55(1):34–43. <https://doi.org/10.1037/003-066X.55.1.34>.
63. Inglehart R, Foa R, Peterson C, Welzel C. Development, freedom, and rising happiness: a global perspective (1981–2007). *Perspect Psychol Sci*. 2008;3(4):264–85. <https://doi.org/10.1111/j.1745-6924.2008.00078.x>.
64. Zimmermann KF, ed. *Handbook of Labor, Human Resources and population Economics*. Springer Nature Switzerland; 2025. <https://doi.org/10.1007/978-3-319-57365-6>.
65. Azizan NH, Mahmud Z. Determinants of subjective well-being: a systematic review. *E-BJP*. 2018;3(7):135. <https://doi.org/10.21834/e-bjp.v3i7.1228>.
66. Mau S, Gülzau F, Laube L, Zaun N. The Global mobility divide: how visa policies have evolved over time. *J Ethnic Migr Stud*. 2015;41(8):1192–213. <https://doi.org/10.1080/1369183X.2015.1005007>.
67. Czaika M, De Haas H. The effect of visas on migration processes. *Int Migr Rev*. 2017;51(4):893–926. <https://doi.org/10.1111/imre.12261>.
68. Deutschmann E, Gabrielli L, Orlova A, Harder N, Recchi E. A time penalty for the Global south? Inequalities in visa appointment wait times at German embassies and consulates worldwide. *Political Geogr*. Published online November, 2025: 103440. doi: <https://doi.org/10.1016/j.polgeo.2025.103440>.
69. Shachar A. *The birthright lottery: citizenship and Global inequality*. Harvard University Press; 2009.
70. Lariscy JT, Hummer RA, Hayward MD. Hispanic Older adult Mortality in the United States: new estimates and an assessment of factors shaping the Hispanic paradox. *Demography*. 2015;52(1):1–14. <https://doi.org/10.1007/s13524-014-0357-y>.
71. Markides KS, Rote S. The healthy immigrant effect and Aging in the United States and other Western countries. *Gerontologist*. 2019;59(2):205–14. <https://doi.org/10.1093/geront/gny136>.
72. Acevedo-Garcia D, Bates LM, Osypuk TL, McArdle N. The effect of immigrant generation and duration on self-rated health among US adults 2003–2007. *Soc Sci Med*. 2010;71(6):1161–72. <https://doi.org/10.1016/j.socscimed.2010.05.034>.
73. Akresh IR. Dietary Assimilation and health among Hispanic immigrants to the United States. *J Health Soc Behav*. 2007;48(4):404–17. <http://www.jstor.org/stable/27638724>.
74. Pope S, Weisner Z. From Development to deterrence? Migration spending under the EU neighbourhood Development and International cooperation instrument (NDICI). *Oxfam International*; 2023. <https://doi.org/10.21201/2023.621536>.
75. Bakewell O. "Keeping them in their place": the ambivalent relationship between Development and migration in Africa. *Third World Q*. 2008;29(7):1341–58. <http://www.jstor.org/stable/20455113>.
76. Bah TL, Batista C, Gubert F, McKenzie D. Can information and alternatives to irregular migration reduce "backway" migration from the Gambia? *J Devel Econ*. 2023;165:103153. <https://doi.org/10.1016/j.jdevco.2023.103153>.
77. Debray A, Scheerens C, Sow N, Gueye DD, Toma S, Ruysen I. Policy Recommendations for Enhancing Capabilities of Senegalese Youth Navigating Immobility Challenges. *Recommandations Politiques pour Renforcer les Capacités des Jeunes Sénégalais face aux Défis de l'Immobilité: Qualitative Data Insights from the "Migration Aspiration, Immobility and Wellbeing" Workshop*. Aperçus Qualitatifs des Données Issues du Workshop « Aspiration à la Migration, Immobilité et Bien-être ». AFOC. 2024;37(2):393–418. <https://doi.org/10.1163/2031356x-20240212>.
78. Cheung HY, Chan AWH. The effect of education on life satisfaction across countries. *AJER*. 2009;55(1). <https://doi.org/10.55016/ojs/ajer.v55i1.55278>.
79. Kristoffersen I. Great expectations: education and subjective wellbeing. *J Econ Psychol*. 2018;66:64–78. <https://doi.org/10.1016/j.joep.2018.04.005>.
80. Powdthavee N, Lekfuangfu WN, Wooden M. What's the good of education on our overall quality of life? A simultaneous equation model of education and life satisfaction for Australia. *J Behavioral Exp Econ*. 2015;54:10–21. <https://doi.org/10.1016/j.socsc.2014.11.002>.
81. Salinas-Jiménez MDM, Artés J, Salinas-Jiménez J. Education as a positional good: a life satisfaction approach. *Soc Indic Res*. 2011;103(3):409–26. <https://doi.org/10.1007/s11205-010-9709-1>.
82. Striessnig E, Lutz W. Too educated to be happy? An investigation into the relationship between education and subjective well-being.
83. Witter RA, Okun MA, Stock WA, Haring MJ. Education and subjective well-being: a meta-analysis. *Educ Evaluation Policy Anal*. 1984;6(2):165–73. <https://doi.org/10.3102/01623737006002165>.
84. Boyce CJ, Brown GDA, Moore SC. Money and Happiness: rank of income, not income, affects life satisfaction. *Psychol Sci*. 2010;21(4):471–75. <https://doi.org/10.1177/0956797610362671>.
85. Johnson W, Krueger RF. How money buys happiness: genetic and environmental processes linking finances and life satisfaction. *J Personality Soc Psychol*. 2006;90(4):680–91. <https://doi.org/10.1037/0022-3514.90.4.680>.
86. Arrindell WA, Heesink J, Feij JA. The satisfaction with life Scale (SWLS): appraisal with 1700 healthy young adults in the Netherlands. *Personality Individual Differences*. 1999;26(5):815–26. [https://doi.org/10.1016/S0191-8869\(98\)00180-9](https://doi.org/10.1016/S0191-8869(98)00180-9).
87. Das KV, Jones-Harrell C, Fan Y, Ramaswami A, Orlove B, Botchwey N. Understanding subjective well-being: perspectives from psychology and public health. *Public Health Rev*. 2020;41(1):25. <https://doi.org/10.1186/s40985-020-00142-5>.
88. George LK, Landerman R. Health and subjective well-being: a replicated secondary data analysis. *Int J Aging Hum Dev*. 1984;19(2):133–56. <https://doi.org/10.2190/FHHT-25R8-F8KT-MAJD>.
89. Grant N, Wardle J, Steptoe A. The relationship between life satisfaction and health Behavior: a cross-cultural analysis of young adults. *Int J Behav Med*. 2009;16(3):259–68. <https://doi.org/10.1007/s12529-009-9032-x>.
90. Okun MA, Stock WA, Haring MJ, Witter RA. Health and subjective well-being: a meta-analysis. *Int J Aging Hum Dev*. 1984;19(2):111–32. <https://doi.org/10.2190/QGJN-0N81-5957-HAQD>.
91. Palmore E, Luikart C. Health and social factors related to life satisfaction. *J Health Soc Behav*. 1972;13(1):68. <https://doi.org/10.2307/2136974>.
92. Siedlecki KL, Tucker-Drob EM, Oishi S, Salothouse TA. Life satisfaction across adulthood: different determinants at different ages? *J Posit Psychol*. 2008;3(3):153–64. <https://doi.org/10.1080/17439760701834602>.
93. Bamundo PJ, Kopelman RE. The moderating effects of occupation, age, and urbanization on the relationship between job satisfaction and life

satisfaction. *J Vocat Behav.* 1980;17(1):106–23. [https://doi.org/10.1016/0001-8791\(80\)90020-2](https://doi.org/10.1016/0001-8791(80)90020-2).

94. Haar JM, Russo M, Suñe A, Ollier-Malaterre A. Outcomes of work-life balance on job satisfaction, life satisfaction and mental health: a study across seven cultures. *J Vocat Behav.* 2014;85(3):361–73. <https://doi.org/10.1016/j.jvb.2014.08.010>.
95. Judge TA, Watanabe S. Another look at the job satisfaction-life satisfaction relationship.
96. Rice RW, Near JP, Hunt RG. The job-satisfaction/life-satisfaction relationship: a review of empirical research. *Basic Appl Soc Psychol.* 1980;1(1):37–64. https://doi.org/10.1207/s15324834basp0101_4.
97. Clark A, Georgellis Y, Sanfey P. Scarring: the psychological impact of past Unemployment. *Economica.* 2001;68(270):221–41. <https://doi.org/10.1111/1468-0335.00243>.
98. Paul KI, Moser K. Unemployment impairs mental health: meta-analyses. *J Vocational Behav.* 2009;74(3):264–82. <https://doi.org/10.1016/j.jvb.2009.01.001>.
99. Stam K, Sieben I, Verbakel E, De Graaf PM. Employment status and subjective well-being: the role of the social norm to work. *Work, Employ Soc.* 2016;30(2):309–33. <https://doi.org/10.1177/0950017014564602>.
100. Winkelmann L, Winkelmann R. Why are the unemployed so Unhappy? Evidence from panel data. *Economica.* 1998;65(257):1–15. <https://doi.org/10.1111/1468-0335.00111>.
101. Bailey TC, Eng W, Frisch MB, Snyder CR. Hope and optimism as related to life satisfaction. *J Posit Psychol.* 2007;2(3):168–75. <https://doi.org/10.1080/17439760701409546>.
102. Diener E, Lucas RE, Scollon CN. Beyond the hedonic treadmill: revising the adaptation theory of well-being. *Am Psychologist.* 2006;61(4):305–14. <https://doi.org/10.1037/0003-066X.61.4.305>.
103. Diener E, Lucas RE, Oishi S. Advances and open questions in the Science of subjective well-being. In: Hall N, Donnellan MB, editors. *Collabra: psychology.* Vol. 4(1): 2018. p. 15. <https://doi.org/10.1525/collabra.115>.
104. Karademas EC. Self-efficacy, social support and well-being. *Personality Individual Differences.* 2006;40(6):1281–90. <https://doi.org/10.1016/j.paid.2005.10.019>.
105. Lyubomirsky S, Layous K. How do simple positive activities Increase well-being? *Curr Dir Psychol Sci.* 2013;22(1):57–62. <https://doi.org/10.1177/0963721412469809>.
106. MacLeod AK, Conway C. Well-being and the anticipation of future positive experiences: the role of income, social networks, and planning ability. *Cognition Emotion.* 2005;19(3):357–74. <https://doi.org/10.1080/02699930441000247>.
107. MacLeod AK, Conway C. Well-being and positive future thinking for the self versus others. *Cognition Emotion.* 2007;21(5):1114–24. <https://doi.org/10.1080/02699930601109507>.
108. Oriol X, Miranda R, Bazán C, Benavente E. Distinct routes to understand the relationship between dispositional optimism and life satisfaction: self-control and grit, positive affect, gratitude, and meaning in life. *Front Psychol.* 2020;11:907. <https://doi.org/10.3389/fpsyg.2020.00907>.
109. Anheier HK, Stares S, Grenier P. Social capital and life satisfaction. In: Arts W, Halman L, editors. *European values at the turn of the Millennium.* BRILL; 2004. p. 81–107. https://doi.org/10.1163/9789047405900_008.
110. Doi K, Hiwatari M. Heterogeneous impacts of community-level trust on life satisfaction in transition countries: perspectives on institutions and Regional diversity. *Appl Res Qual Life.* 2023;18(6):2895–934. <https://doi.org/10.1007/s11482-023-10212-w>.
111. Tonn G, ed. *Quality of life in communities of Latin countries.* Springer International Publishing; 2017. <https://doi.org/10.1007/978-3-319-53183-0>.
112. Zhang RJ. Social trust and satisfaction with life: a cross-lagged panel analysis based on representative samples from 18 societies. *Soc Sciamp; Med.* 2020;251:112901. <https://doi.org/10.1016/j.socscimed.2020.112901>.
113. Diener E, Tay L, Myers DG. The religion paradox: if religion makes people happy, why are so many dropping out? *J Pers Soc Psychol.* 2011;101(6):1278–90. <https://doi.org/10.1037/a0024402>.
114. Gebauer JE, Sedikides C, Neberich W. Religiosity, social self-esteem, and psychological adjustment: on the cross-cultural specificity of the psychological benefits of religiosity. *Psychol Sci.* 2012;23(2):158–60. <https://doi.org/10.1177/0956797611427045>.
115. Lim C, Putnam RD. Religion, social networks, and life satisfaction. *Am Sociol Rev.* 2010;75(6):914–33. <https://doi.org/10.1177/0003122410386686>.
116. Bartram D. Age and life satisfaction: getting control variables under control.
117. De Ree J, Alessie R. Life satisfaction and age: dealing with underidentification in age-period-cohort models. *Soc Sci Med.* 2011;73(1):177–82. <https://doi.org/10.1016/j.socscimed.2011.04.008>.
118. Karwetzky C, Michaelsen MM, Werdecker L, Esch T. The U-Curve of Happiness revisited: correlations and Differences in life satisfaction over the span of life—an empirical Evaluation based on data from 1, 597 individuals aged 12–94 in Germany. *Front Psychol.* 2022;13:837638. <https://doi.org/10.3389/fpsyg.2022.837638>.
119. Arrosa ML, Gandelman N. Happiness decomposition: female optimism. *J Happiness Stud.* 2016;17(2):731–56. <https://doi.org/10.1007/s10902-015-9618-8>.
120. González-Carrasco M, Casas F, Malo S, Viñas F, Dinisman T. Changes with age in subjective well-being through the adolescent years: differences by gender. *J Happiness Stud.* 2017;18(1):63–88. <https://doi.org/10.1007/s10902-016-9717-1>.
121. Graham C, Chattopadhyay S. Gender and well-being around the world. *IJHD.* 2013;1(2):212. <https://doi.org/10.1504/IJHD.2013.055648>.
122. Helliwell J, Layard R, Sachs J, et al. Happiness and age: summary. in: University of Oxford; 2024. <https://doi.org/10.18724/WHR-KK3M-B586>.
123. Herbst CM. 'Paradoxical' decline? Another look at the relative reduction in female happiness. *J Econ Psychol.* 2011;32(5):773–88. <https://doi.org/10.1016/j.joep.2011.07.001>.
124. Montgomery M. Reversing the gender gap in happiness. *J Econ Behav Organ.* 2022;196:65–78. <https://doi.org/10.1016/j.jebo.2022.01.006>.
125. Kirmanoğlu H, Başlevent C. Life satisfaction of Ethnic Minority members: an examination of interactions with Immigration, discrimination, and Citizenship. *Soc Indic Res.* 2014;116(1):173–84. <https://doi.org/10.1007/s11205-013-0276-0>.
126. Knies G, Nandi A, Platt L. Life satisfaction, ethnicity and neighbourhoods: is there an effect of neighbourhood ethnic composition on life satisfaction? *Soc Sci Res.* 2016;60:110–24. <https://doi.org/10.1016/j.ssresearch.2016.01.010>.
127. Kööts-Ausmees L, Realo A. Life satisfaction among Ethnic Minorities in Europe. *J Cross-Cult Psychol.* 2016;47(3):457–78. <https://doi.org/10.1177/0022022116628671>.
128. Safi M. Immigrants' life satisfaction in Europe: between Assimilation and discrimination. *Eur Sociological Rev.* 2010;26(2):159–76. <https://doi.org/10.1093/esr/jcp013>.
129. Verkuyten M. Life satisfaction among Ethnic Minorities: the role of discrimination and group identification. *Soc Indic Res.* 2008;89(3):391–404. <https://doi.org/10.1007/s11205-008-9239-2>.
130. Gattig A, Minkus L. Does Marriage Increase couples' life satisfaction?: evidence using panel data and fixed-effects Individual slopes. *CPoS.* 2021;46. <https://doi.org/10.12765/CPoS-2021-05>.
131. Næss S, Blekesaune M, Jakobsson N. Marital transitions and life satisfaction: evidence from longitudinal data from Norway. *Acta Sociologica.* 2015;58(1):63–78. <https://doi.org/10.1177/0001699314563841>.
132. Zimmermann AC, Easterlin RA. Happily ever after? Cohabitation, Marriage, divorce, and Happiness in Germany. *Popul Devel Rev.* 2006;32(3):511–28. <https://doi.org/10.1111/j.1728-4457.2006.00135.x>.
133. Baetschmann G, Staub KE, Studer R. Does the stork deliver happiness? Parenthood and life satisfaction. Published online 2016.
134. Cho J, Jung H. Parenthood and life satisfaction in stratified Labor market: evidence from Korea. *Front Public Health.* 2022;10:874877. <https://doi.org/10.3389/fpubh.2022.874877>.
135. Mikucka M, Rizzi E. The Parenthood and Happiness link: testing predictions from five theories. *Eur J Popul.* 2020;36(2):337–61. <https://doi.org/10.1007/s10680-019-09532-1>.
136. Pollmann-Schult M. Parenthood and life satisfaction: why Don't children make people happy? *J Marriage Fam.* 2014;76(2):319–36. <https://doi.org/10.1111/jomf.12095>.
137. Özmen S, Özkan O, Özer Ö, Yanardağ MZ. Investigation of COVID-19 fear, well-being and life satisfaction in Turkish Society. *Soc Work Public Health.* 2021;36(2):164–77. <https://doi.org/10.1080/19371918.2021.1877589>.
138. Bidzan-Bluma I, Bidzan M, Jurek P, et al. A Polish and German population study of Quality of life, well-being, and life satisfaction in Older adults during the COVID-19 pandemic. *Front Psychiatry.* 2020;11:585813. <https://doi.org/10.3389/fpsyg.2020.585813>.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.