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The subjective well-being penalty of same-sex couples relative to different-sex couples in Europe

Manuela Stranges^{1*} and Daniele Vignoli^{2*}

*Correspondence:

Manuela Stranges
manuela.stranges@unical.it
Daniele Vignoli
daniele.vignoli@unifi.it

¹Department of Economics,
Statistics and Finance “Giovanni
Anania”, University of Calabria,
Arcavacata di Rende, CS, Italy

²Department of Statistics,
Informatics, Applications “G.
Parenti”, University of Florence,
Florence, Italy

Abstract

Despite major advances in the legal recognition of same-sex couples across Europe, persistent social stigma and institutional inequalities may continue to shape their subjective well-being (SWB). This study examines whether individuals in same-sex couples report lower levels of SWB than those in different-sex couples and how two key dimensions of structural stigma—legal recognition of same-sex couples and societal acceptance of homosexuality—shape disparities in SWB. Using pooled data from ten rounds of the European Social Survey (2004–2023), covering 37 countries, we estimate regression models to assess the SWB penalty of individuals in same-sex relative to different-sex couples. We further test cross-level interactions between being in a same-sex (versus different-sex) couple and country-level indicators of structural stigma. Our results show that individuals in same-sex couples report significantly lower levels of SWB than those in different-sex couples, net of socio-demographic and economic controls. This penalty is strongly conditioned by context, however. In countries without legal recognition of same-sex couples, the well-being penalty is largest, whereas in countries recognizing civil unions or same-sex marriage, the penalty becomes statistically indistinguishable from zero. Higher levels of societal acceptance similarly attenuate the penalty in life satisfaction. These findings highlight the central role of legal and cultural environments in shaping well-being inequalities between individuals in same- and different-sex couples and emphasize the importance of structural inclusion for reducing minority stress in contemporary Europe.

Introduction

Over the past several decades, the institutions of marriage and the family have undergone profound transformations. Since the latter half of the twentieth century in particular, traditional family forms have given way to an increasing diversity of intimate arrangements, including cohabitation, nonmarital childbearing, and interethnic and interreligious relationships (Pirani & Vignoli, 2022; Rosenfeld, 2007; Thornton & Young-DeMarco, 2001; Vignoli et al., 2018). Within this evolving landscape, same-sex couples have emerged as a visible and increasingly studied demographic group.

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While same-sex couples have gained growing legal recognition—over 20 countries in Europe now permit same-sex marriage, and many others provide civil union rights (ILGA-Europe, 2021)—societal stigma and institutional discrimination persist. The latest annual report (2025) from the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA) highlights that the legal acknowledgment of same-sex couples and family rights remains highly uneven across Europe, with ongoing resistance in several countries. Moreover, even where legal recognition has been achieved, individuals in same-sex couples continue to face minority stress, hostile public attitudes, and barriers to full social integration (Eskridge & Spedale, 2006; Hatzenbuehler et al., 2009; Gonzales, 2014; King et al., 2008). These contradictory forces raise critical questions about subjective well-being (SWB)—defined here as individuals' personal evaluations of their quality of life—of sexual minorities.

The present paper contributes to a growing body of socio-demographic research examining the lived experiences of same-sex couples, not merely as a legal category, but as a distinct population group whose well-being is shaped by structural conditions and cultural climates (Kasprowski & Boertien, 2025; Mollborn et al., 2025; Rodríguez Sánchez & Boertien, 2025; White et al., 2020). Although prior studies have begun to document differences in SWB between same- and different-sex couples (Powdthavee & Wooden, 2015; Tornello et al., 2018) and to assess the effects of marriage equality and related policy reforms on sexual minorities' well-being (Boertien & Vignoli, 2019; Patacchini et al., 2015), comprehensive large-scale evidence spanning diverse institutional and cultural contexts remains limited.

This paper provides a cross-national analysis of disparities in SWB between individuals in same-sex and different-sex couples across Europe. Beyond estimating the magnitude of this penalty, we examine how country-level conditions—specifically the degree of legal recognition of same-sex unions and prevailing societal attitudes toward homosexuality—shape well-being differences. We ask: *Do individuals in same-sex couples report lower levels of SWB than those in different-sex couples?* And, if yes, *is this penalty amplified in countries characterized by weaker legal recognition and lower social acceptance of homosexuality?* To answer these questions, we draw on ten rounds of the European Social Survey (ESS), spanning 2004–2023 and covering 37 countries. Although the ESS was not specifically designed to study same-sex couples, its detailed demographic and household roster information enables the indirect identification of individuals living in same-sex co-residential couples.

Background and hypotheses

The minority stress perspective

Over the past decades, the increasing availability of data on registered partnerships, including same-sex couples (Digoix & Festy, 2004; Festy, 2006), has stimulated growing academic interest. Demographic research has examined key aspects such as union stability and dissolution (Andersson et al., 2006; Noack et al., 2005), providing valuable insights into the dynamics and longevity of same-sex couples. Relatively less attention, however, has been devoted to the everyday lived experiences of these sexual minorities, particularly with regard to their SWB.

Public discourse on same-sex marriage—especially in media and political arenas—continues to be shaped by normative, legal, and moral debates. Scholars have long

argued that the lack of social recognition, limited legal protection, and reduced familial support can adversely affect multiple domains of life, contributing to lower levels of well-being among individuals in same-sex couples—that is, to a penalty in SWB compared to different-sex couples (Berg & Lien, 2008; Chen & van Ours, 2018; Elmslie & Tebaldi, 2007; Patacchini et al., 2015). A substantial body of research further shows that institutional discrimination has profound consequences for the health and well-being of marginalized groups (Chamie & Mirkin, 2011). Hatzenbuehler et al. (2009) suggest that discriminatory policy environments can exert persistent and damaging effects on both mental health and overall life satisfaction among LGBTQ+ individuals. Religious norms also play a critical role in reinforcing societal pressures. In many European countries, dominant religious institutions explicitly reject same-sex couples, framing them as morally unacceptable or incompatible with spiritual life. For instance, Catholic doctrine expects same-sex individuals to remain celibate, discouraging romantic relationships and instead advocating for “disinterested friendships” (Ruiu & Gonano, 2020, p. 1186). These teachings further marginalize same-sex couples and contribute to the psychological strain experienced by those in committed partnerships.

Overall, the experiences of sexual minorities are theoretically captured by the Minority Stress Model (Meyer, 2003), which posits that they face two types of stressors: external (distal), such as stigma, discrimination, and legal inequalities; and internal (proximal), including internalized homophobia and identity concealment. While Meyer (2003) did not explicitly frame the model in terms of micro- and macro-level processes, the distinction between distal and proximal stressors corresponds closely to these analytic levels: structural stigma and institutional discrimination operate at the macro level, whereas internalized homophobia, concealment, and hypervigilance function at the micro level, together shaping the SWB of LGBTQ+ individuals. These chronic stressors have been strongly linked to poorer mental health and lower levels of SWB. Notably, empirical evidence shows that the well-being penalty of same-sex relative to different-sex couples is not merely a historical artifact but persists even in societies where legal recognition and public acceptance of same-sex couples have markedly increased (Waite & Denier, 2015). A recent review by Frost and Meyer (2023) reaffirms the continued relevance of the Minority Stress Model, highlighting that minority stress is not only a consequence of legal exclusion but is also deeply embedded in cultural norms, institutional practices, and everyday interactions.

In this paper, we compare individuals in cohabiting same-sex couples to individuals in cohabiting different-sex couples, rather than to the broader adult population. This choice is substantively motivated: partnership status is strongly associated with SWB. A large body of research documents a “partnership premium”, whereby married and cohabiting individuals report higher levels of SWB than singles, partly due to emotional support, economic pooling, and social integration (e.g., Blanchflower & Oswald, 2004; Vignoli et al., 2014; Waite & Joyner, 2001). At the same time, entry into a union is selective: individuals who form and maintain partnerships tend to be positively selected on health, socioeconomic stability, and psychosocial resources, meaning that differences in well-being partly reflect selection rather than causal effects alone (Kohler et al., 2005). Comparing partnered same-sex individuals to all other adults would therefore conflate differences related to union status with differences related to union type. By comparing same-sex and different-sex couples among partnered individuals, we aim to hold

constant the general selection into union and isolate differences specifically associated with being in a same- versus different-sex couple rather than partnership status per se.

Taken together, the minority stress framework and the study's focus on partnered couples lead us to expect that *individuals in same-sex couples report lower levels of SWB than those in different-sex couples* (H1).

The structural stigma perspective

Building on Meyer's (2003) Minority Stress Model, Link and Phelan (2001) distinguished between individual, interpersonal, and structural forms of stigma. Individual stigma refers to psychological responses such as identity concealment (Pachankis, 2007) and internalized negative beliefs, or self-stigma (Corrigan et al., 2013). Interpersonal stigma arises in interactions between stigmatized and non-stigmatized individuals (Hebl & Dovidio, 2005). Structural stigma, by contrast, operates at the societal level and encompasses discriminatory laws, institutional policies, cultural norms, and unequal access to resources (Hatzenbuehler, 2016). Even in the absence of direct interpersonal discrimination, such structural conditions can systematically disadvantage marginalized groups (Corrigan et al., 2004; Eskridge & Spedale, 2006; Herek, 2007; Link & Phelan, 2001). Hatzenbuehler and Link (2014) define stigma as societal-level conditions, norms, and institutional arrangements that constrain opportunities and undermine well-being.

Conceptualizations of structural stigma have informed two main strategies for its empirical measurement: *legal/policy analysis* and *indicators of social acceptance* (Hatzenbuehler, 2016). The first approach codes the presence or absence of laws and policies across countries or jurisdictions to assess institutional exclusion (e.g., Corrigan et al., 2004). Access to marriage may enhance SWB for at least two interrelated reasons. First, it removes barriers to valued relationship goals, such as legal security, long-term stability, and social recognition (Frost & LeBlanc, 2014; Frost et al., 2017). Second, it reduces the stress associated with unequal legal treatment, a factor consistently linked to poorer mental and physical health among LGBTQ+ individuals (Hatzenbuehler et al., 2009; Frost et al., 2017; Thomeer et al., 2018). Unequal legal recognition has itself been identified by same-sex partners as a source of chronic minority stress, affecting both those excluded from marriage and those who internalize messages about the inferior status of their relationships (LeBlanc et al., 2018).

Accordingly, a growing body of empirical research shows that the legal recognition of same-sex couples plays a key role in reducing SWB disparities between sexual minorities and heterosexual individuals (Bränström & Pachankis, 2025; Gonzales, 2014; Hatzenbuehler, 2010; Hatzenbuehler et al., 2012; King et al., 2008; Thomeer et al., 2018; Wight et al., 2013). Evidence from the United States shows that legal contexts have measurable consequences for mental health and healthcare access (Gonzales & Blewett, 2014; Hatzenbuehler et al., 2009; Kail et al., 2015). Psychiatric disorders increased in states that enacted same-sex marriage bans (Hatzenbuehler, 2010), whereas mental healthcare use declined following legalization in Massachusetts (Hatzenbuehler et al., 2012). Boertien and Vignoli (2019), examining England and Wales, show that marriage legalization affects well-being not only through individual uptake but through broader contextual change: life satisfaction increased among individuals in same-sex couples after legalization, including among those who did not marry.

This focus on legal recognition of same-sex couples, however, captures only the formal legal landscape. It does not account for more informal institutional dynamics—such as tacit norms, discretionary practices, or everyday bureaucratic routines—that can also perpetuate stigma but are not codified in law (Livingston, 2013). At the same time, the impact of legal reforms is neither automatic nor uniform. The social and emotional experiences of sexual minorities remain shaped by wider cultural and institutional forces, and legal progress often outpaces societal attitudes.

The second approach moves beyond legal recognition to consider the role of societal acceptance of homosexuality. Expectations about the SWB penalty of individuals in same- relative to different-sex couples parallel findings from research on marriage and cohabitation. Studies show that the well-being differential between cohabitators and married individuals is smaller in societies where cohabitation is socially normalized (Liefbroer & Dourleijn, 2006; Perelli-Harris et al., 2019; Pirani & Vignoli, 2016; Soons & Kalmijn, 2009; Wiik et al., 2012). By analogy, greater social acceptance of homosexuality should attenuate well-being differences between same- and different-sex couples. Empirically, this perspective requires aggregating survey-based measures of public attitudes toward stigmatized groups at broader geographic levels—such as communities, states, or countries—and linking them to outcomes among those groups (Evans-Lacko et al., 2012; Hatzenbuehler and Link, 2014; Miller et al., 2011). This method reduces same-source bias by separating the measurement of contextual attitudes from individual-level outcomes (Diez Roux, 2007). Nonetheless, this approach may underestimate stigma levels due to socially desirable responses (Livingston, 2013). In cross-national research, these two dimensions—legal recognition and social acceptance—are frequently used as complementary indicators of structural stigma, reflecting both the formal and informal societal mechanisms that constrain the rights and well-being of marginalized groups (Hatzenbuehler, 2016).

Building on this theoretical and empirical literature, we expect that as structural stigma declines, the SWB penalty of individuals in same- relative to different-sex couples will narrow, reflecting the reduced salience of minority stress in more inclusive contexts (H2). Specifically, *countries that formally recognize same-sex unions, and eventually same-sex marriage, are expected to alleviate the psychological burden associated with minority stress* (H2a). In parallel, *higher levels of societal acceptance of homosexuality should attenuate disparities in SWB between same- and different-sex couples* (H2b).

Materials and methods

Data

This study employed pooled cross-sectional data from the ESS, spanning 10 biennial rounds from 2004 to 2023 and covering 37 European countries. The ESS is a high-quality, cross-national data source that follows a biennial schedule from 2002 (Round 1) to 2020 (Round 10). Due to the pandemic, Round 11 began in 2023 and concluded in 2024. The validity of using the pooled dataset is well-established in the literature (see, e.g., McDaniel, 2013; Safi, 2010; Soons & Kalmijn, 2009; Stranges et al., 2021).

Dependent variable

The dependent variable in this analysis was life satisfaction, used as a proxy for SWB, measured by the question: “All things considered, how satisfied are you with

your life as a whole nowadays?” Respondents provided answers on an 11-point scale (0=“extremely dissatisfied”, 10=“extremely satisfied”). For individuals in different-sex couples the mean value of the dependent variable is 7.14 (SD = 2.19), while for those in same-sex couples it is 7.17 (SD = 2.10).

Table A1 in the appendix reports the average values of SWB for the whole sample, for different-sex and same-sex couples for each country. Overall, the descriptive evidence does not point to a systematic disadvantage (or advantage) in life satisfaction for same-sex respondents across countries; rather, the observed variation appears largely idiosyncratic and likely driven by small sample sizes and measurement noise.

Independent variable: detecting same-sex and different-sex couples with ESS

The key explanatory variable compared individuals in cohabiting same-sex unions (=1) with those in cohabiting different-sex unions (=0). Although not originally conceived to study same-sex couples specifically, the ESS includes sufficiently detailed demographic and household-level variables that allow researchers to identify individuals in same-sex couples through indirect methods. We adopted an approach based on respondents' self-reported gender and the gender and relationship of other members of the household, classifying respondents as being in a same-sex couple if they reported cohabiting with a spouse or partner of the same gender, as recorded in the household grid. The survey's standard measure of gender primarily reflects a binary classification—limited to male and female categories—and does not systematically account for individuals who identify as non-binary, transgender, or outside of traditional gender norms. While this method excludes non-cohabiting or closeted individuals and may underrepresent more fluid identities, it enabled us to construct a consistent sample of cohabiting same-sex couples across countries and survey waves.

Prior to the analysis, data from Round 1 of the survey were excluded,¹ along with data from Russia and Poland, as these countries reported no individuals in same-sex couples. After these restrictions, the final sample consisted of 253,948 individuals² living with a partner or spouse across 37 countries.³ Among these, 3779 individuals were in same-sex couples, representing 1.49% of the total number of couples in the sample (Table 1). Starting with just 1.01% of unions being same-sex in Round 2, the share of same-sex couples gradually increased, reaching 2.36% by Round 11. This points to a steady increase in the visibility of same-sex unions in the ESS sample over time.

In the Appendix (Table A1) we report information about the share of same-sex couples in the sample by country.⁴

¹ ESS data start from 2002, but we excluded Round 1 because of the unavailability of some relevant variables for our analysis.

² We considered all individuals cohabiting with a partner from 15 to 94 years, which are the lower and upper limits of the distribution. In the robustness checks, we applied some age restrictions.

³ The following countries were included in the analysis: Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Montenegro, the Netherlands, North Macedonia, Norway, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and the United Kingdom.

⁴ The percentage of same-sex couples varies considerably across rounds and countries, ranging from a minimum of 0.09% in Latvia (ESS round 4, 2008) to a maximum of 13.3% in Italy (ESS round 8, 2016). This variability may reflect differences in sample design, potential sampling bias, or fluctuations related to the timing of legal recognition across countries. For instance, the value for Italy in round 8 (13.3%) is particularly high and may be influenced by the introduction of civil unions (Legge Cirinnà, June 2016), which coincides with the data collection period. This legal recognition likely encouraged many previously informal same-sex partnerships to be formalized, resulting in greater representation of such couples in the sample.

Table 1 Distribution of same-sex and different-sex unions over ESS rounds, absolute and percentage values

ESS round	Year	Different-sex	Same-sex	Total	% same-sex individuals over total
2	2004	27,791	283	28,074	1.01
3	2006	23,795	247	24,042	1.03
4	2008	31,627	338	31,965	1.06
5	2010	28,263	367	28,630	1.28
6	2012	30,281	293	30,574	0.96
7	2014	23,219	407	23,626	1.72
8	2016	24,236	452	24,688	1.83
9	2018	27,739	660	28,399	2.32
10	2020	20,722	430	21,152	2.03
11	2023	12,496	302	12,798	2.36
Total	-	250,169	3,779	253,948	1.49

Individual-level controls

Several demographic, family, and socio-economic control variables were included in the models.⁵ Among the demographic factors, we included: age (and its squared term), gender (a dummy variable coded 1 = female), number of people in the household, and whether the individual had ever had a child (a dummy variable coded as 1 = ever had a child). Additionally, religious affiliation was included, as a categorical variable with the following categories: No religion (reference), Catholic, Protestant, Islamic, Orthodox, other religions.

Socio-economic variables included: the individual's level of education, partner's level of education, mother's and father's levels of education (all coded into 3 categories: 1 = low education, 2 = medium education; 3 = high education⁶), employment status (1 = employed; 2 = unemployed actively searching for a job; 3 = all other conditions⁷), income level (coded into 3 categories: 1 = low income, 2 = medium income; 3 = high income⁸) and area of residence, a dummy variable coded as 1 = urban area (big city, suburbs or outskirts of big city, or small city) and 0 = all the others (country village, or farm or home in countryside). Country and survey round dummies were also included to account for country-specific and time-related effects.

In the multivariate analyses, due to some missing values in the variables included in the models, the number of observations was reduced to 252,806, of which 3759 were in same-sex couples (1.5%). Summary statistics for all the covariates included in the multivariate analysis are reported in Table A2 in the Appendix.

⁵ We do not include health among the regressors because prior research (e.g., King et al., 2008; Lick et al., 2013) shows it is strongly correlated with SWB, making it potentially endogenous to our outcome. Importantly, our results remain substantively unchanged when health is included as a control as a robustness check, confirming the robustness of the findings.

⁶ As the coding of education level has changed over ESS rounds (5 categories for Rounds 1–4, and 7 subsequently), in order to ensure consistency across ESS waves, we harmonized the measurement of education variables creating three dummies: low education (lower secondary education – EISCED 2 as the highest level) – used as reference in all the models; medium education (secondary school – EISCED 3–4); high education (tertiary education – EISCED 5 and higher). Missing values were imputed to the medium category.

⁷ This category includes: unemployed, not looking for a job; permanently sick or disabled; in education; retired; community or military service; housework, looking after children; other conditions.

⁸ The coding of income has changed over ESS rounds (12 categories in Rounds 1–3, and 10 afterwards). To harmonize data for the first three rounds with income codified in deciles of income in subsequent rounds of ESS, we collapsed the first two modalities into one and the last two categories into one, obtaining ten modalities. The distribution of this new variable is similar to that of income level in ESS 4–9, further supporting our recoding choice. Then, for all the rounds, we coded income in three dummies: low income (deciles 1–4), medium income (deciles 5–7), and high income (deciles 8–10). Missing values were imputed to the medium category.

Country-level variables

To test the role of structural stigma at the country level, we considered two key variables in the analysis. The first variable captures the degree of legal recognition of same-sex couples. We constructed a country-level indicator of legal institutionalization for each year of the survey. This categorical variable distinguishes between three levels of legal recognition: 0 = no legal rights for same-sex couples (reference category), 1 = civil unions allowed, and 2 = same-sex marriage allowed. The measure reflected the legal status in place at the time of data collection in each country. While cross-country variability is substantial—reflecting important differences in legal and institutional contexts—within-country variability over time remains limited, as relatively few countries experienced shifts in legal status during the observation period.

The second variable is social institutionalization/acceptance, which we operationalized through an in-sample indicator capturing the degree to which respondents agreed with the statement, “*Gays and lesbians are free to live life as they wish*”. The responses were measured on a 5-point Likert scale (1=“Agree strongly” to 5=“Disagree strongly”), and then reversed so that higher scores denote a more accepting societal attitude. To examine how tolerance varies across contexts, we aggregated individual responses to the country-round level, computing the mean score of the variable for each country in each round of the ESS. Across all 37 countries and 10 rounds, the overall mean was 3.75 (SD = 0.57), with scores ranging from a low of 2.30 to a high of 4.71. Average social acceptance was lowest in the earlier rounds (minimum: 3.57 in 2008), while the most recent round (2023) recorded the highest level (4.01), indicating a general upward trend in societal tolerance.

Methods

We employed ordinary least squares (OLS) regression models in the analysis, with life satisfaction as the outcome variable. Although this approach formally assumes cardinality of the dependent variable, OLS models have been widely used to study life satisfaction and happiness (e.g., Arima, 2021; Chen & van Ours, 2018; Clark et al., 2008; Ferrer-i-Carbonell & Frijters, 2004; Mustafa, 2022; Pawlowski et al., 2011; Stranges et al., 2021), with some works showing that linear specifications yield outcomes comparable to non-linear ones (see, e.g., Rasciute & Downward, 2010; Scoppa & Ponzo, 2008; Stutzer & Frey, 2006; Sun et al., 2016).

We adopted a two-step modelling strategy to account for individual- and country-level variables. In the first step, we tested H1 by examining the coefficient of the variable “being in a same-sex union”. A significant and non-negligible coefficient would indicate that being in a same-sex relationship is associated with differences in SWB compared to different-sex couples, supporting or rejecting the hypothesis.

In the second step, we examined whether disparities in SWB are moderated by contextual conditions beyond individual characteristics. To test H2a and H2b explicitly, we estimated two models augmented with the interaction term between the variable “being in a same-sex couple” and each country-level indicator of structural stigma—i.e., legal recognition and prevailing societal attitudes. These are cross-level interactions, reflecting how the country-level variable influences relationships at the micro level. Following Möhring (2021), while including the cross-level interaction in the regression, we excluded the macro-level variable itself and include the cross-country dummies. This strategy makes it possible to infer the role of national contexts indirectly, and offers advantages over

traditional multilevel models. In multilevel analysis, one must ensure that all relevant macro-level variables are specified; by contrast, the fixed-effects framework bypasses this concern by absorbing unobserved country-level differences (Möhring, 2021).⁹ Specifically, to examine H2a and H2b, we plotted the predicted SWB penalty of same-sex relative to different-sex couples by level of legal recognition and social acceptance from the models augmented with cross-level interaction terms.

Results

The SWB penalty of same-sex couples

We estimated an OLS regression to investigate differences in SWB between individuals in same- and different-sex couples (H1), controlling for a range of socio-demographic factors that could influence the results and act as confounders (Table 2).

Individuals in same-sex couples reported a small but significantly lower level of life satisfaction compared to those in different-sex couples ($\beta = -0.131$ on the SWB scale, $p < 0.001$). These results provide support for H1, which confirms a statistically significant—though substantively moderate—SWB penalty of individuals in same-sex couples relative to different-sex couples.

The role of legal recognition and social acceptance

To examine the role of country-level indicators of legal recognition and social acceptance, we estimated two additional models, each including the cross-level interaction between each of the macro-level variables and being in a same-sex couple. From these models, we derived the predicted margins of the SWB penalty of same-sex couples by level of legal recognition (Fig. 1) and by the country-level social acceptance (Fig. 2).¹⁰

The results for the model including the cross-level interaction between the level of legal recognition and the dummy variable for same-sex couples (Fig. 1) show that, in countries where no legal rights are granted to same-sex couples, the well-being penalty of same-sex couples is largest and statistically significant (SWB penalty = -0.18 , $p < 0.01$), indicating that individuals in same-sex couples report slightly lower levels of SWB than those in different-sex couples. As legal recognition increases, this disparity narrows considerably and becomes statistically indistinguishable from zero. When civil unions are allowed, the SWB penalty is small and not statistically significant (SWB penalty = -0.05 , n.s.), and a similar result is observed in contexts where same-sex marriage is legal (SWB penalty = -0.06 , n.s.).

Overall, these findings suggest that the presence of legal recognition—whether through civil unions or marriage—eliminates statistically detectable SWB differences between individuals in same-sex and different-sex couples. This provides support for H2a, indicating that legal recognition plays a meaningful role in reducing well-being disparities between union types.

⁹Möhring (2021) demonstrates that this strategy produces similar estimations to multilevel models. Despite this, we tested the possibility to use multilevel models, but usual preliminary tests (ICC, AIC, BIC) indicated that a standard (single-level) model provided a better fit than a multilevel specification. Therefore, we proceeded with the single-level model to ensure parsimony and interpretability and, following Möhring's strategy, were able to account for the moderating role of country-level factors.

¹⁰For both these models, the results for the remaining covariates included are largely consistent with those from the model without country-level covariates.

Table 2 Results from the linear regression models predicting SWB (life satisfaction), with only individual-level covariates

Variables	Coefficient	Std. error
Same-sex couple	−0.131***	(0.032)
Female	0.080***	(0.008)
Age	−0.069***	(0.002)
Age squared	0.001***	(0.000)
Married	0.260***	(0.012)
Number of family members	−0.019***	(0.005)
Children	−0.055***	(0.013)
Immigrant background	−0.150***	(0.012)
<i>Working status (ref.: All the other conditions)</i>		
Employed	0.151***	(0.011)
Unemployed, actively searching for a job	−0.853***	(0.029)
<i>Level of income (ref.: Low)</i>		
Medium	0.359***	(0.011)
High	0.687***	(0.013)
<i>Level of education (ref.: Low)</i>		
Medium	0.161***	(0.013)
High	0.302***	(0.015)
<i>Partner's level of education (ref.: Low)</i>		
Medium	0.161***	(0.014)
High	0.309***	(0.016)
<i>Father's level of education (ref.: Low)</i>		
Medium	0.032**	(0.012)
High	−0.000	(0.017)
<i>Mother's level of education (ref.: Low)</i>		
Medium	−0.001	(0.012)
High	0.038*	(0.019)
<i>Religious affiliation (ref.: No religion)</i>		
Catholic	0.147***	(0.011)
Protestant	0.235***	(0.012)
Orthodox	−0.083**	(0.025)
Islamic	0.027	(0.032)
Other religions	0.138***	(0.028)
Country dummies	YES	
Round dummies	YES	
Constant	7.934***	(0.051)
Observations	252,806	
Number of clusters	37	
R-squared	0.215	

Robust standard errors, corrected for heteroscedasticity and clustered at the country level, are reported in parentheses.

Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

We now turn to the results of the predicted margins from the model including the cross-level interaction between the country-level variable of social acceptance and being in a same-sex couple (Fig. 2). The findings show evidence of a gradient in the level of the SWB penalty of same-sex couples across levels of country-level social acceptance. The SWB penalty is largest at the lowest observed value of social acceptance, although the estimates are not statistically significant. As social acceptance improves, this disparity narrows progressively and reaches statistical significance ($p < 0.05$ from level 3.5 onward). At a level of social acceptance equal to 5, the estimated difference further attenuates, approaching zero ($p < 0.05$). This trend suggests that higher levels of social

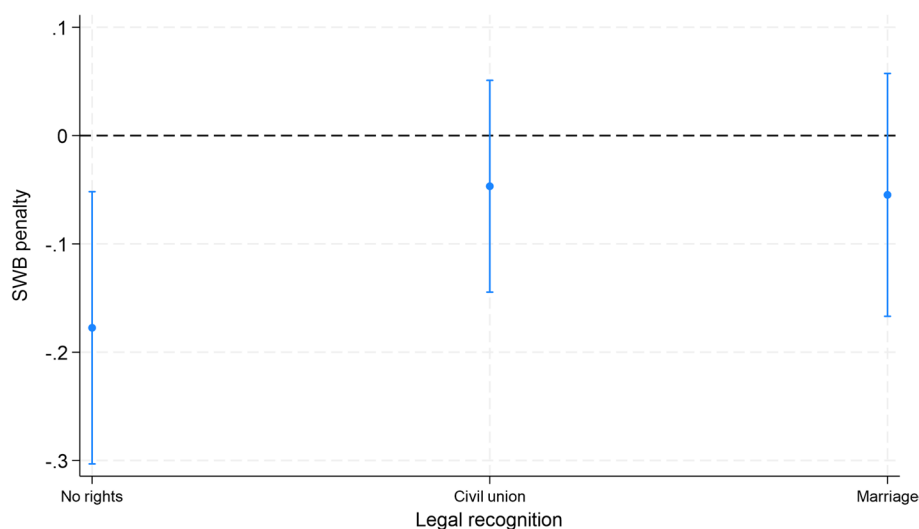


Fig. 1 Predicted SWB penalty of same-sex couples relative to different-sex couples by level of legal recognition. *Notes:* Predicted SWB penalty computed from a model controlling for all the variables included in the main model (see Table 2) plus the cross-level interaction term between the dummy variable “being in a same-sex couple” and the country-level variable of legal recognition. 95% confidence intervals are reported.

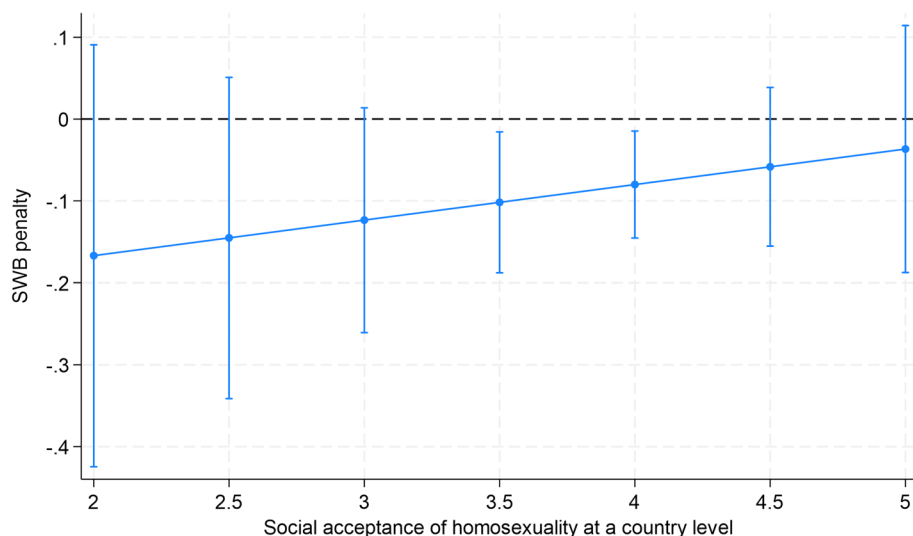


Fig. 2 Predicted SWB penalty of same-sex couples relative to different-sex couples by level of societal acceptance of homosexuality (in-sample measure). *Notes:* Predicted SWB penalty computed from the model controlling for all the variables (see Table 2) plus the cross-level interaction term between the dummy variable “being in a same-sex couple” and the country-level variable of social acceptance. 95% confidence intervals are reported. The figure displays only the range of values for which the model plots predicted values based on actually observed data (in our sample, the social acceptance variable ranges from 2.30 to 4.71), and excludes out-of-range extrapolations.

acceptance play a role in reducing inequalities in life satisfaction between sexual minorities and heterosexuals, thus providing partial empirical support for H2b.

Robustness checks

We ran several additional estimations to assess the robustness of our findings. As a first check, we conducted additional analyses using Propensity Score Matching (PSM) to address potential compositional differences between same- and different-sex couples (Graham et al., 2019; van der Star & Bränström, 2015). Given systematic differences in

socio-demographic characteristics (e.g., education, income, employment, household structure, and parenthood), PSM improves comparability by balancing observed covariates (Rosenbaum & Rubin, 1983). We estimated each respondent's probability of being in a same-sex union using the full set of covariates and implemented 1:1 nearest-neighbor matching without replacement (caliper = 0.1), enforcing common support. Covariate balance was assessed using standardized mean differences and t-tests, yielding a well-balanced matched sample of 3759 same-sex and 3759 different-sex couples. Results (Appendix Table A3) show that, without controls, differences in SWB are small and not statistically significant (7.17 vs. 7.14). With individual controls, a small but significant penalty emerges (-0.131 , $p < 0.001$), consistent with the main models. After matching, the penalty persists (ATET = -0.136 , $p < 0.01$), confirming H1. When both individual and country-level controls are included, the unmatched penalty remains significant (-0.135 , $p < 0.001$), and, although reduced, it remains statistically significant after matching (ATET = -0.105 , $p < 0.05$). We ran two additional models, each including one of the two country-level covariates separately (results not shown). These estimates also confirm the SWB penalty of same-sex couples relative to different-sex couples. Overall, the persistence of the penalty after matching suggests that lower life satisfaction among individuals in same-sex couples reflects substantive differences rather than solely compositional effects.

Additionally, we tested the robustness of our findings by applying different age restrictions in the lower and upper limits of the age distribution across all the estimated models and the corresponding PSM estimations. Despite some slight changes in magnitude, the coefficient for being in a same-sex union was consistently negative and statistically significant in models aiming to test H1 (even after PSM). The patterns for legal recognition and social acceptance were confirmed in models aiming to test H2a and H2b.¹¹

We then turn to test the robustness of findings related to H2b, mainly by using different specification of the social acceptance variable. In a first check, we replaced the continuous social acceptance variable with a three-category variable (in terciles). The results remained substantially unchanged.

In a second check, we constructed the social acceptance variable using the average attitudes toward homosexuality expressed only by individuals not in same-sex couples, yielding a more stringent measure of prevailing societal norms, unaffected by the opinions of same-sex individuals themselves, whose attitudes we expected to be predominantly positive. This check confirmed our findings.

In a third check, we replaced the social acceptance variable with an out-of-sample indicator, the GAI (Global Acceptance Index) released by the Williams Institute (Flores, 2021). This indicator draws on data from over 2750 surveys conducted across 30 years to track shifts in attitudes toward LGBT individuals and issues in 175 countries. Each country receives a score from 0 to 10, reflecting its overall level of acceptance. We introduced into the model the cross-level interaction term between this indicator¹² and the dummy variable “being in a same-sex couple”. The results are similar to those obtained with the in-sample social acceptance level, although with a less marked trend, indicating that higher values of GAI are associated with a reduction in the SWB penalty.

¹¹ Complete results of this and the following additional robustness checks are not shown for the sake of brevity, but are available on request.

¹² We used the most recent available dataset covering the period 2017–2020; in this case, the variable is time-invariant.

In a final check, we broadened our measure of social acceptance, including two additional variables of attitudes toward homosexuality available in Rounds 8–11 of the ESS, measuring the degree of agreement with the following statements: “*Gay and lesbian couples’ right to adopt children*” and “*If a close family member was a gay man or a lesbian, I would feel ashamed*”.¹³ We combined these two additional variables with the one used in the main models (“*Gays and lesbians are free to live life as they wish*”) and ran a principal component analysis on the three variables, using the score of the first component as an overall measure of social acceptance averaged by country and ESS round. We then reran our models restricted to observations in ESS Rounds 8–11. The results confirm that social acceptance—measured as a synthetic indicator of the three original variables—is significantly related to a reduction in the SWB penalty of individuals in same-sex couples relative to different-sex couples.

Conclusions

Discussion of hypotheses

The transformation of family structures and the diversification of intimate partnerships in contemporary societies have opened new avenues for empirical inquiry. The experiences of same-sex couples have gained increasing visibility in the social sciences, prompting a growing body of research aimed at understanding how institutional, cultural, and interpersonal factors shape their quality of life (Rodríguez Sánchez & Boertien, 2025). This study contributes to this literature by examining SWB among individuals in same-sex couples, with a focus on both individual characteristics and broader socio-institutional contexts.

Our analysis, based on a large pooled sample from multiple rounds of the ESS extends prior research. Van der Star and Bränström (2015), relying on a single ESS round and a smaller sample, reported no significant association between being in a same-sex partnership and SWB once covariates were included. Although modest in magnitude, the difference we detect in our analysis is not negligible and is meaningful, offering empirical support for our first research hypothesis, which anticipated a SWB disadvantage among individuals in same-sex couples compared to those in different-sex couples. This finding is consistent with prior research showing that sexual minorities often report lower well-being even within stable relationships (e.g., Waite & Denier, 2015). The penalty likely reflects the enduring impact of structural and interpersonal discrimination, incomplete social acceptance, and the cumulative psychological strain associated with minority stress. Notably, this penalty may also reflect a masking effect: in more accepting countries, same-sex individuals may feel freer to be open about their identity and relationships, potentially increasing exposure to subtle forms of stigma or microaggressions not captured by broader measures of societal acceptance. This paradox echoes findings in the literature suggesting that coming out can both improve mental health (via authenticity and social support) and increase vulnerability to discrimination, especially in transitional social climates (Herek, 2009).

Our findings further suggest that the SWB penalty of same-sex couples relative to different-sex couples is moderated by country-level context, providing empirical support for H2 in both its institutional (H2a) and social (H2b) dimensions. Legal recognition of same-sex couples emerges as a pivotal factor. The SWB penalty becomes statistically

¹³ Both original variables were measured on a 5-point Likert scale (1=“Agree strongly” to 5=“Disagree strongly”). The first one was then reversed so that higher scores denote a more accepting societal attitude.

non-significant in countries where same-sex couples have access to civil unions or marriage, compared to contexts lacking any formal recognition. This finding aligns with the hypothesis that legal contexts shape well-being and is consistent with prior evidence showing that the effects of legal reforms extend beyond those who directly utilize them (e.g., Boertien & Vignoli, 2019). Legal change carries not only institutional consequences but also symbolic significance. By formally affirming the legitimacy of same-sex relationships—through measures such as marriage equality or anti-discrimination protections—reforms provide social validation, reduce legal and social vulnerability, and signal broader societal acceptance. In doing so, they strengthen individuals' sense of belonging and perceived legitimacy, both of which are central to subjective well-being.

Importantly, the legal dimension operates in tandem with other macro-level trends, including generational shifts in attitudes, the increasing visibility of LGBTQ+ individuals in media and public life, and the strengthening of queer social networks and community institutions. In this vein, our findings also show that individuals in same-sex couples report slightly higher life satisfaction in contexts where homosexuality is more socially accepted—that is, where it is not only legally recognized but also embedded in public norms, institutions, and everyday practices. This points to the importance of the surrounding sociocultural climate: even subtle shifts in public discourse and symbolic inclusion can tangibly affect people's lived experience. These broader cultural developments likely reinforce the positive moderating effects of legal recognition, indicating that improvements in SWB stem from a confluence of structural and normative changes rather than from policy alone.

Legal and social contexts explain part—but not all—of the observed disadvantage. While acceptance and legal recognition are key dimensions of structural inclusion, same-sex couples may still experience interpersonal stigma, everyday discrimination, or family and economic penalties not captured by our measures. Such forms of marginalization can persist even in otherwise supportive environments. The remaining penalty may also reflect a gap between formal change and lived experience, as institutions such as healthcare systems, educational settings, and labour markets tend to adapt more slowly than legislation. Finally, because greater acceptance and legal rights can improve well-being broadly, their benefits may raise overall life satisfaction without fully eliminating relative differences between groups.

Limitations

Several limitations should be acknowledged. First, the identification of same-sex couples in the ESS is constrained by the survey design, which does not include direct questions on sexual orientation and does not systematically capture non-binary or gender-diverse identities. Our analysis therefore relies on an indirect identification strategy—cross-classifying respondents' binary gender with that of their cohabiting partner in the household grid. Consequently, our sample likely represents a selective subgroup of same-sex couples—those who are visible, cohabiting, and willing to report their living arrangements—potentially overrepresenting more stable or socially integrated couples.

A further limitation concerns the relatively small number of identified same-sex couples. Although pooling ten rounds of ESS data across 37 countries substantially expands the sample, the absolute number of observations remains modest—especially when disaggregating by gender, country, or period. This limits statistical power and our ability to examine heterogeneity or intersectional inequalities (e.g., by class, ethnicity, or

geography). To mitigate these constraints, we implemented PSM to balance observable socio-demographic differences between individuals in same- and different-sex couples. The matched analyses not only confirm our main findings but suggest that the SWB penalty may be even more pronounced, implying that baseline estimates from the full sample could underestimate existing disparities.

Two additional limitations relate to the use of pooled ESS data and the cross-sectional study design. While the pooled dataset—widely adopted in the literature (see, among others, Akaeda, 2022; Glatz & Eder, 2020; Stranges et al., 2021; Stranges, 2022)—increases statistical power, pooling different waves may attenuate temporal variation and obscure contextual differences between countries. It may also raise concerns regarding the cultural comparability of measures and the hierarchical structure of the data (Davidov et al., 2014; Harkness et al., 2010). Furthermore, the cross-sectional design of the ESS precludes causal inference and limits our ability to track well-being trajectories over time. Accordingly, our findings should be interpreted as correlational in nature.

Implications

Our findings reveal a context-dependent pattern in the subjective well-being penalty of same-sex couples relative to different-sex couples. Although we observe a small but statistically significant penalty on average, this translates into a modest penalty that is largely confined to disadvantaged contexts characterized by limited legal recognition and lower social acceptance. In more tolerant settings, by contrast, there is no clear penalty, as differences become small and statistically indistinguishable from zero. These results suggest that the overall disadvantage should not be interpreted as a general disadvantage or universal finding, but rather as reflecting contextual heterogeneity. Consistent with a reading of the minority stress framework (Frost & Meyer, 2023; Meyer, 2003), the impact of structural and interpersonal stigma appears conditional and is attenuated in more supportive environments. As legal recognition and social acceptance increase, disparities in well-being narrow and may effectively disappear.

Taken together, our findings suggest that the subjective well-being of individuals in same-sex couples reflects a complex interplay between lived experiences and structural conditions. While legal recognition and social acceptance improve outcomes, they do not fully eliminate more subtle forms of marginalization. The study underscores the value of large-scale comparative data and highlights the need for more comprehensive measures of sexual identity and relationship type, so as to move beyond partial or potentially biased insights into the well-being of sexual minorities in Europe.

Appendix

See Tables A1, A2, and A3¹⁴.

¹⁴For the sake of brevity, we report only the results of the PSM estimations. Balance diagnostics for covariates before and after propensity score matching, as well as other analytical details, are not shown but are available upon request from the authors.

A1 Descriptives by country

Country	Individuals in same-sex couple		Average life satisfaction		
	Share over the total same-sex sample size	Share over the total number of observations by country	Everyone	Different-sex couple	Same-sex couple
Albania	0.03	0.13	5.67	5.67	5.60
Austria	2.87	1.52	7.86	7.85	8.20
Belgium	4.55	1.77	7.63	7.63	7.73
Bulgaria	1.33	0.65	5.00	5.00	5.06
Croatia	1.09	0.93	6.99	6.98	8.22
Cyprus	1.33	1.51	7.29	7.29	6.74
Czech Republic	3.19	1.19	6.83	6.84	6.79
Denmark	3.48	1.83	8.63	8.63	8.40
Estonia	2.61	1.04	6.63	6.63	6.30
Finland	3.62	1.15	8.18	8.19	7.88
France	5.19	1.94	6.68	6.68	6.93
Germany	7.32	1.76	7.44	7.44	7.36
Greece	1.60	1.06	6.20	6.20	6.13
Hungary	1.62	0.64	6.05	6.04	6.52
Iceland	1.01	1.47	8.28	8.29	7.95
Ireland	8.57	2.73	7.38	7.39	7.09
Israel	2.37	1.18	7.69	7.69	7.67
Italy	11.12	8.94	7.09	7.11	6.94
Kosovo	0.69	3.15	5.93	5.93	5.88
Latvia	0.37	0.95	6.19	6.18	6.93
Lithuania	1.62	0.90	6.27	6.27	6.07
Luxembourg	0.16	0.60	7.93	7.93	8.50
Montenegro	1.33	3.91	7.19	7.20	6.98
Netherlands	5.19	1.82	7.91	7.91	7.82
North Macedonia	0.45	1.98	6.56	6.56	6.59
Norway	4.12	1.58	8.06	8.06	7.95
Portugal	1.60	0.64	6.03	6.03	6.07
Romania	0.67	2.02	6.14	6.14	6.16
Serbia	0.64	2.41	6.18	6.18	6.25
Slovakia	3.54	1.89	6.36	6.37	5.68
Slovenia	2.58	1.22	7.12	7.13	7.02
Spain	2.39	0.96	7.37	7.37	7.23
Sweden	2.39	1.02	8.11	8.12	7.70
Switzerland	2.82	1.09	8.31	8.31	7.97
Turkey	0.56	0.78	5.82	5.81	7.19
Ukraine	0.88	0.62	4.62	4.62	4.61
United Kingdom	5.11	1.82	7.47	7.48	7.33

A2 Summary statistics of the sample ($N = 252,806$)

Variable	Mean	Std. dev.	Min	Max
Life satisfaction	7.140	2.188	0	10
Same-sex union	0.015	–	0	1
Social acceptance of homosexuality at the country level	3.746	0.571	2.305	4.707
<i>Legal recognition of same-sex couples at the country level</i>				
No rights	0.381	–	0	1
Civil unions allowed	0.366	–	0	1
Marriage allowed	0.253	–	0	1
Female	0.512	–	0	1
Age	50.946	15.326	15	94
Age squared	2830.380	1612.777	225	8836
Married	0.836	–	0	1
Number of family members	3.047	1.243	1	10
Children	0.513	–	0	1
Immigrant background	0.171	–	0	1
<i>Level of income</i>				
Low	0.240	–	0	1
Medium	0.517	–	0	1
High	0.243	–	0	1
<i>Working status</i>				
Employed	0.564	–	0	1
Unemployed, actively searching for a job	0.032	–	0	1
All the other conditions	0.404	–	0	1
<i>Level of education</i>				
Low	0.194	–	0	1
Medium	0.588	–	0	1
High	0.217	–	0	1
<i>Partner's level of education</i>				
Low	0.168	–	0	1
Medium	0.656	–	0	1
High	0.177	–	0	1
<i>Father's level of education</i>				
Low	0.351	–	0	1
Medium	0.573	–	0	1
High	0.075	–	0	1
<i>Mother's level of education</i>				
Low	0.416	–	0	1
Medium	0.529	–	0	1
High	0.055	–	0	1
<i>Religious affiliation</i>				
Catholic	0.313	–	0	1
Protestant	0.132	–	0	1
Orthodox	0.086	–	0	1
Islamic	0.038	–	0	1
Other religion	0.042	–	0	1
No religion	0.389	–	0	1
Living in an urban area	0.608	–	0	1
<i>Year</i>				
2004	0.111	–	0	1
2006	0.095	–	0	1
2008	0.126	–	0	1
2010	0.113	–	0	1
2012	0.120	–	0	1
2014	0.093	–	0	1

A2 (continued)

Variable	Mean	Std. dev.	Min	Max
2016	0.097	–	0	1
2018	0.112	–	0	1
2020	0.083	–	0	1
2023	0.050	–	0	1
Country				
Albania	0.003	–	0	1
Austria	0.029	–	0	1
Belgium	0.038	–	0	1
Bulgaria	0.030	–	0	1
Croatia	0.017	–	0	1
Cyprus	0.013	–	0	1
Czech Republic	0.040	–	0	1
Denmark	0.028	–	0	1
Estonia	0.037	–	0	1
Finland	0.047	–	0	1
France	0.040	–	0	1
Iceland	0.010	–	0	1
Germany	0.062	–	0	1
Greece	0.022	–	0	1
Hungary	0.038	–	0	1
Ireland	0.047	–	0	1
Israel	0.030	–	0	1
Italy	0.019	–	0	1
Kosovo	0.003	–	0	1
Latvia	0.006	–	0	1
Lithuania	0.027	–	0	1
Luxembourg	0.004	–	0	1
North Macedonia	0.003	–	0	1
Montenegro	0.005	–	0	1
Netherlands	0.042	–	0	1
Norway	0.039	–	0	1
Portugal	0.037	–	0	1
Romania	0.005	–	0	1
Serbia	0.004	–	0	1
Slovakia	0.028	–	0	1
Slovenia	0.031	–	0	1
Spain	0.037	–	0	1
Sweden	0.035	–	0	1
Switzerland	0.039	–	0	1
Turkey	0.011	–	0	1
Ukraine	0.021	–	0	1
United Kingdom	0.042	–	0	1

Category percentages may not sum to 100 due to rounding

A3 PSM results: average SWB scores for same-sex and different-sex couples. Unmatched versus matched estimates

	Treated (same-sex unions)		Controls (different-sex unions)		SWB pen- alty (same- sex minus different-sex)	Std. error	T-stat	Signifi- cance
	Sam- ple size	Aver- age SWB	Sample size	Aver- age SWB				
Unmatched (without controls)	3759	7.167	249,047	7.140	0.027	0.036	0.74	n.s.
<i>With only individual controls</i>								
Unmatched (with controls) *	3759	7.011	249,047	7.142	−0.131	0.032	−4.10	$p < 0.001$
ATET **	3759	7.167	3759	7.303	−0.136	0.049	−2.80	$p < 0.01$
<i>With individual + country-level controls</i>								
Unmatched (with controls) *	3759	7.007	249,047	7.143	−0.135	0.032	−4.23	$p < 0.001$
ATET **	3759	7.167	3759	7.272	−0.105	0.049	−2.13	$p < 0.05$

*Predicted margins from the full regression model; ** ATET refers to average treatment effect on the treated. Standard Errors do not take into account that the propensity score is estimated

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Author contributions

MS: conception of the study, literature review, data management, data analysis, interpretation, drafting the manuscript, revision. DV: conception of the study, literature review, interpretation, drafting the manuscript, revision. All authors approved the final version.

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Data availability

Data are publicly available at <https://www.europeansocialsurvey.org/>.

Declarations

Ethics approval and consent to participate

No informed consent was necessary, since data are acquired from a publicly available dataset.

Competing interests

The authors faithfully declare that there is no conflict of interest regarding the publication of this article. The research does not involve Human Participants and/or Animals.

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