ORIGINAL RESEARCH



Let Them Be, Not Adopt: General Attitudes Towards Gays and Lesbians and Specific Attitudes Towards Adoption by Same-Sex Couples in 22 European Countries

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Accepted: 9 February 2020 / Published online: 22 February 2020 © Springer Nature B.V. 2020

Abstract

By relying on two items included in the 8th round of the European Social Survey (2016-2017), this article compares general attitudes towards gays and lesbians and attitudes towards the specific issue of adoption by same-sex couples in 22 countries. Ordered logit multilevel models reveal that age, education and religiosity have a weaker association with attitudes towards adoption than with attitudes towards homosexuality in general. In contrast, at the contextual-level, the presence of laws and policies ensuring rights for the LGBTI population is positively associated with both attitudes to a similar extent. However, models with random slopes and cross-level interactions reveal important differences in the way critical individual-level characteristics operate in different contexts. In particular, across countries, youth, higher educated and secular respondents display more positive attitudes towards homosexuality regardless of whether their country recognizes legal rights to LGBTI people. Instead, these individual characteristics are associated with positive attitudes towards adoption by same-sex couples only in countries that are more progressive in terms of LGBTI rights. These results point to the existence of "mixed opinions" in the way people in Europe think about rights for gays and lesbians and indicate that large attitudinal gaps persist even in the most progressive countries.

Keywords Attitudes towards adoption \cdot Homosexuality \cdot Gay and lesbian couples \cdot European social survey \cdot Europe

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1 Introduction

Much empirical research shows that, in Europe and other Western countries, individuallevel attitudes towards same-sex relationships have become increasingly positive over the past decades (Flores 2015; Halman and van Ingen 2015; Jakobsson et al. 2013; Loftus 2001; Lubbers et al. 2009; Scott 1998; Takács et al. 2016; Whitehead and Perry 2016). Furthermore, at the institutional level, since the late 1980s many European countries have passed legislation to uniform family rights for straight and lesbian, gay, bisexual, transsexual and intersex (LGBTI) families (Merin 2010). However, the debate on family rights for same-sex couples remains heated in several southern and eastern European countries where same-sex couples are currently denied the right to marry or adopt and where antigender movements have gained momentum in recent years (Graff 2014; Kováts 2018; Kuhar and Paternotte 2017).

Whether same-sex couples should have full *adoption* rights is an especially sensitive issue. Because it involves the well-being of a minor, moral beliefs play an exceptionally strong role in molding individuals' opinion in this respect (Takács et al. 2016; Whitehead and Perry 2016). Due to the scarcity of empirical evidence on the topic, adoption by samesex parents lends itself well to a lot of "armchair theorizing" where personal values, ideals and morals have the lion's share (Meezan and Rauch 2005). Owing to the "difficulty" of the issue, explanations used in previous research to account for general attitudes towards homosexuality might not work as well when it comes to a *specific* issue such as adoption by same-sex couples. Comparing general and specific attitudes is theoretically useful because it allows us to uncover mixed opinions in the way citizens think about rights for same-sex families. Furthermore, it permits a broader assessment of where European citizens stand in terms of acceptance of same-sex relationships, a crucial step in the road towards greater inclusiveness and equality in rights and opportunities. While expressing positive attitudes towards homosexuality (generally) can be considered the first step toward acceptance, support for adoption by same-sex couples (specifically) signals a fuller commitment towards the equality in formal rights between straight and LGBTI people. Therefore, the goal of this article is to provide a cross-national comparison of general and spe*cific* attitudes towards same-sex relationships in Europe.

Previous research highlighted that certain individual-level variables (in particular age, level of education and religiosity) are crucial predictors of general attitudes towards homosexuality (Van den Akker et al. 2013; Halman and van Ingen 2015; Takács et al. 2016; Whitehead and Perry 2016). However, classic variables used to account for acceptance of same-sex relationships in general might not have the same explanatory power when it comes to adoption by same-sex couples, due to the sensitive nature of the issue. Thus, the first contribution of the article is to test whether there is variation in the way crucial individual-level variables predict general and specific attitudes towards homosexuality.

Furthermore, existing research shows that, to varying degrees, macro-level characteristics are positively associated with attitudes towards same-sex relationships. Specifically, subjects are found to be more accepting of homosexuality in countries where laws and policies establishing the rights for LGBTI people exist (Jäckle and Wenzelburger 2015; Kuntz et al. 2015; Takács et al. 2016; Van den Akker et al. 2013). However, whether this holds true for both general and specific attitudes has not been tested in previous studies. Indeed, the formal recognition of rights for LGBTI people might play a minor role when it comes to specific attitudes towards adoption, an issue in which personal moral beliefs might play a stronger role for opinion formation. Therefore, the second contribution of this article is Finally, we set out to test whether the explanatory power of individual characteristics varies among countries that are more or less evolved in terms of rights for LGBTI people. Specifically, our last contribution is to explore to what extent individual characteristics drive support for both general and specific attitudes *in different contexts*. Theories of diffusion (Rogers 1962) and class differentiation (Bourdieu 1984) suggest that innovative behaviors and attitudes are adopted by a selected group of forerunners (the "élites") and then gradually are picked up by the wider population. Following these theories, we would expect individual-level differences in both general and specific attitudes towards gays and lesbians to have largely disappeared in countries that have passed legislation in support of equality between the LGBTI and the straight population. In contrast, we expect to find large individual-level differences in both types of attitudes in the least gay-friendly countries.

We address these points using data from the 8th round of the European Social Survey (ESS 2016). For the first time since its inception in 2002 the survey includes two items ("Gay men and lesbians should be free to live their own life as they wish" and "Gay male and lesbian couples should have the same rights to adopt children as straight couples") that allow a direct comparison of general and specific individual attitudes towards homosexuality. Our analyses, based on ordered logit models with data from 22 countries, reveal that respondents across Europe are more likely to accept homosexuality in general rather than adoption by same-sex couples, and that individual-level characteristics play a stronger role in accounting for general attitudes than for specific ones. Furthermore, both types of attitudes are more positive in contexts that legally support same-sex relationships, but we find a stronger association between the individual-level variables and both outcomes in countries that are more progressive in their recognition of LGBTI rights. In contrast, the analyses reveal virtually no association between individual-level characteristics and attitudes towards adoption in contexts without legal rights for LGBTI. In other words, we find that youth, higher education and secularity are positively associated with attitudes towards adoption only in countries that ensure rights to LGBTI people. This suggests that the diffusion process by which same-sex relationships become fully accepted in a social system is going so slowly that, in the least progressive contexts, the élites have yet to adopt positive attitudes towards homosexuality. Furthermore, it appears that the specific issue at stake, adoption by same-sex couples, is so highly sensitive that it accrues the support of only a very selected group of individuals, i.e. the so-called élites that live in contexts that already guarantee family rights to LGBTI people.

2 Theoretical Background: Explaining General and Specific Attitudes Towards Same-Sex Relationships

To understand individual variation in the acceptance of same-sex relationships, research has relied on explanations for attitudes towards moral issues, broadly defined (Van den Akker et al. 2013). This line of theorizing suggests that individual attitudes are fundamentally shaped by socialization processes that occur at different levels. On the one hand, exposure to certain socializing agents at the micro-level—such as parents, schools and religious institutions—can have important effects on individual attitudes (Flores 2015; Jakobsson et al. 2013; Lubbers et al. 2009; Ohlander et al. 2005; Treas 2002; Whitehead and Perry 2016). On the other hand, citizens are also embedded in wider geographical and historical

contexts that act as macro-level socializing agents that shape attitudes (Andersen and Fetner 2008; Halman and van Ingen 2015; Kuntz et al. 2015; Takács et al. 2016; Yerkes et al. 2018). In the following sections, we draw on previous studies on attitudes towards homosexuality to develop our hypotheses concerning the relationship between both general and specific attitudes and crucial micro- and macro-level characteristics.

2.1 Micro-level Socializing Factors

Research has found that several individual-level characteristics are strongly associated with attitudes towards homosexuality generally and towards certain issues of same-sex family life specifically. In this article, we focus on three individual traits that have received much attention in previous literature: age, years of education and religiosity. We restrict our analyses to these three variables because they have been extensively used to predict general attitudes towards homosexuality (as detailed below) and can therefore be used as a relevant anchor point from which to study specific attitudes towards adoption by same-sex couples.

Starting from age, studies find that older individuals tend to display more homonegativity (Jäckle and Wenzelburger 2015). In most countries, older cohorts grew up in contexts where same-sex relationships were firmly rejected and by no means regulated by law (Van den Akker et al. 2013). In the years following the sexual revolution, views towards samesex relationships improved considerably (Treas et al. 2014). As a result, cross-national research finds young individuals to be much more favourable towards gays and lesbians than older ones (Kuntz et al. 2015; Scott 1998; Takács et al. 2016).

Another variable that is strongly associated with attitudes towards homosexuality is education. Scholars point out that "education is considered to increase people's general knowledge, to stimulate critical thinking and to expand people's frame of reference, which might induce tolerance for those who differ from traditional norms" (Van den Akker et al. 2013, p. 68). Previous research consistently shows that highly educated individuals report more favourable attitudes towards homosexuality. For example, Ohlander et al. (2005) find a positive relationship between education and tolerance of same-sex relations. The authors show that support for civil liberties and greater cognitive sophistication, both driven by education, are responsible for such positive association. Whitehead and Perry (2016) also find a positive association between level of education and support for adoption by gays and lesbians in the US. An early comparative study by Scott (1998) similarly showed that across Britain, the US, Ireland, West and East Germany, Sweden and Poland, highly educated individuals had considerably more positive views of same-sex relations compared to low educated ones. Such result is confirmed in more recent comparative studies on Europe and worldwide (Adamczyk and Pitt 2009; Van den Akker et al. 2013; Jäckle and Wenzelburger 2015; Kuntz et al. 2015; Takács et al. 2016).

Much previous research also pointed out that religiosity and church attendance are strongly related to attitudes towards same-sex relationships in general (Adamczyk and Pitt 2009; Jäckle and Wenzelburger 2015) and towards specific issues of same-sex family life such as marriage (Lubbers et al. 2009; Whitehead 2010) or adoption (Whitehead and Perry 2016). Indeed "religion provides a moral compass by which devout people are more reluctant to accept [...] homosexuality" (Halman and van Ingen 2015, p. 617). Same-sex love and relationships can have a negative connotation in holy writings and be the target of a religious ban. Furthermore, it is not uncommon for spiritual leaders to express their positions for or against it. Empirically, studies find that religiosity and affiliation to certain religions are associated with less acceptance of homosexuality. Jäckle and Wenzelburger

(2015) analyze the cross-national variation in homonegativity, defined as "an aversion to homosexuality as a social practice" (p. 208), and its relationship with religion and religiosity. In another comparative study, Halman and van Ingen (2015) find a negative association between church attendance and acceptance of homosexuality. A single country study on the Netherlands revealed a negative association between church membership and religious practice and support for same-sex marriage (Lubbers et al. 2009). Similarly, in their study on Norway and Sweden, Jakobsson et al. (2013) found that individuals attending church at least once per month were considerably less likely to support same-sex marriage. A relatively smaller number of studies has looked at attitudes towards adoption by same-sex couples and little empirical evidence is available on the relationship between attitudes towards adoption and religiosity. A recent example is the study on the US by Whitehead and Perry (2016) who show that religious factors are strongly associated with negative attitudes towards adoption by same-sex couples. However, they also show that religious affiliation is less important compared to religious practices. The comparative study on 28 European countries by Takács et al. (2016) includes church attendance among the predictors of attitudes towards adoption by same-sex couples. The results of the study also confirm a negative association between religious attendance and support for adoption by gay and lesbian couples. Furthermore, a small-sample study on Portuguese university students showed that Catholic respondents were significantly less in favour of adoption by same-sex couples (Costa et al. 2014).

To sum up, previous research has found very strong associations between attitudes towards same-sex relationships and, respectively, age, education and religiosity. Most of the mentioned studies focus on general attitudes, rather than attitudes towards specific aspects of same-sex family life. Adoption, however, is an especially sensitive topic because individuals are likely to consider it a public rather than a private matter compared to, for example, sexual orientation (Takács et al. 2016). Therefore, even subjects who on average display favourable attitudes towards same-sex relationships, such as youth, the better educated and the secular, might be reluctant to support adoption rights for same-sex couples. If this is the case, then individual-level differences in terms of age, education and religiosity would have little discriminative power.

Based on this reasoning we formulate our first hypothesis: (a) age, (b) education, and (c) religiosity will have a stronger association with general attitudes towards gay and lesbians than with specific attitudes towards adoption by gay and lesbian couples (*Hypothesis 1*).

2.2 Macro-level Socializing Factors

Beyond individual-level socializing agents, recent research has been exploiting the available large comparative datasets to explore the relation between contextual, macro-level characteristics and attitudes towards homosexuality. Extant research concurs that several contextual characteristics are positively associated with support towards same-sex relationships, albeit with varying degrees of intensity. In particular, the existence of laws and policies establishing the rights of LGBTI people is generally found to be associated with greater acceptance. For example, Jäckle and Wenzelburger (2015, p. 224) find that: "[t] he more legal rights granted to homosexual people, the more positive attitudes the general population has toward homosexuality". Similarly, Van den Akker et al. (2013) and Kuntz et al. (2015) find that citizens are more approving of homosexuality in countries where laws allow same-sex marriage or adoption by gay and lesbian couples, whereas Takács et al. (2016) find a positive association between the existence of such laws and support for adoption by same-sex couples.

We contribute to this strand of literature by testing whether the association between attitudes towards same-sex relationships at the individual-level and presence of legal rights for LGBTI people at the macro-level varies depending on the type of attitude considered (general vs. specific). Following the same reasoning that we applied for the individuallevel, we expect adoption to be less permeable to external influences, being firmly rooted in individuals' personal moral beliefs. In other words, if the presence of legal rights for LGBTI people might reduce homonegativity in general, it might not be enough to move individuals' opinions on the more delicate topic of adoption by same-sex couples.

Thus, we hypothesize that laws and policies guaranteeing LGBTI rights will have a stronger association with general attitudes towards gays and lesbians than with specific attitudes towards adoption by gay and lesbian couples (*Hypothesis 2*).

2.3 The Interplay of Micro- and Macro-level Characteristics

A further question that we seek to answer is whether the association between the individual-level variables and general and specific attitudes will be *constant* across contexts or will *vary* in response to national policies ensuring rights to LGBTI people. The interaction between the micro- and the macro-level is relevant in this respect because it can provide us a clearer understanding of what are the circumstances under which different individuals fully endorse equal rights for straight and homosexual people.

According to Bourdieu's (1984) theory of class differentiation, the members of an élite act as groundbreakers in the process of accepting new trends and the rest of society follows. According to this logic, the higher social strata will act as forerunners and be the first to display positive attitudes towards homosexuality, differentiating themselves from the rest of the population. However, as more and more subjects become accepting of samesex relationship, individual differences in acceptance become smaller. In other words, if the process of "normalization" of same-sex relationships has reached an advanced stage, then individual support should be high regardless of personal characteristics. By way of example, we would expect that in a country like Denmark, that was the first worldwide to introduce civil unions for same-sex couples, individuals with different levels of education would express similar and favourable attitudes towards same-sex relationships. In Russia, instead, a highly educated individual would likely have considerably more favourable attitudes towards homosexuality than a lower educated one, as the country is extremely conservative in this respect.

Based on this reasoning, we expect the association between age, education, and religious attendance and general attitude towards gays and lesbians to be weaker in contexts where there are laws and policies guaranteeing rights for LGBTI people and stronger in contexts where these rights are not present (*Hypothesis 3a*).

When it comes to the specific issue of adoption be same-sex couples our expectation is different. The idea that gay men and lesbians should have the same right to adopt as straight couples entails a much greater component of innovation and requires much more open mindedness compared to the general issue. It may therefore encounter greater resistance in reaching the various social strata, especially in social systems that are more behind in the process of "normalization" of same-sex relationships. Going back again to the previous example, individuals with different levels of education living in Russia would likely express similar and unfavourable attitudes towards adoption by same-sex couples, whereas the Danish higher educated person would probably be more in favour of this practice than her lower educated fellow citizen.

In other words, our expectation for this issue is exactly the opposite: we expect the association between age, education, and religious attendance and attitudes towards adoption by same-sex couples to be stronger in contexts where LGBTI rights are present and weaker in contexts where these rights are absent (*Hypothesis 3b*).

3 Methodology

3.1 Data and Sample

For the analyses we rely on data from the 8th round of the European Social Survey (ESS). The ESS is a biannual survey carried out in over 30 countries that aims at investigating citizens' attitudes on a wide range of topics including politics, well-being, social trust, social exclusion, welfare, gender roles and human values. The 8th round, carried out between 2016 and 2017, is especially suited for our analysis as it includes two items capturing what people think about gays and lesbians in general and about adoption by gay and lesbian couples.

Our sample consists of respondents residing in the 22 countries that participated in the 8th round: Austria (AT), Belgium (BE), Switzerland (CH), Czech Republic (CZ), Germany (DE), Estonia (EE), Finland (FI), France (FR), Hungary (HU), Ireland (IE), Iceland (IS), Italy (IT), Lithuania (LT), the Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Russia (RU), Sweden (SE), Slovenia (SI), Spain (ES) and the United Kingdom (UK). After selecting respondents between 18 and 85 years old and applying listwise deletion to missing cases,¹ our final sample consists of 37,133 respondents.

3.2 Measures

Our dependent variables are based on the responses to two items. The first asks the extent to which subjects agree with the statement: "Gay men and lesbians should be free to live their own life as they wish", while the second asks the extent to which they agree with the statement: "Gay male and lesbian couples should have the same rights to adopt children as straight couples". In the remaining of the article we refer to the former as general attitudes and to the latter as specific attitudes. The response categories are: Agree strongly=1, Agree=2, Neither agree nor disagree=3, Disagree=4, Disagree strongly=5. To simplify the interpretation, we have reversed the variables so that higher scores indicate more favourable attitudes.

Our main predictors of interest at the micro-level are age in years (min = 18, max = 85) and its square, years of formal education (min = 0, max = 25, top coded), and frequency of church attendance (1 = never, 7 = every day).

At the country-level, we rely on the ILGA Index. The Index is developed by the International Lesbian, Gay, Bisexual, Trans and Intersex Association, which is an independent non-governmental umbrella organization gathering about 600 organizations. The index maps the extent to which laws and policies affect the human rights of LGBTI

¹ For each variable we have no more than 5% missing observations.

people according to six categories: equality and non-discrimination; family; bias motivated speech/violence; legal gender recognition; freedom of assembly, association and expression; and asylum. It is therefore factual as it covers a wide variety of policy and legislative devices to ensure that LGBTI citizens are not discriminated, are entitled to family rights, are protected from violence and can live freely in the polity expressing their opinions. The index has been used as a reference to assess the status of LGBTI rights in Europe in various academic publications (see Berggren et al. 2017; Kuntz et al. 2015; Page 2018; Van den Akker et al. 2013). The Index ranges from 0 (gross violations of human rights, discrimination) to 100 (respect of human rights, full equality) and it covers the period from January to December 2016 (ILGA 2017).

Following previous literature (Van den Akker et al. 2013; Kuntz et al. 2015; Lubbers et al. 2009), at the individual-level we control for a set of variables that have been shown to impact attitudes towards homosexuality. We include a dummy variable for gender (men as reference versus women) as previous studies consistently show that women have more favorable attitudes towards homosexuality than men (Kuntz et al. 2015; Halman and van Ingen 2015; Lottes and Alkula 2011). Following Van den Akker et al. (2013) who find an association between employment status and support for same-sex relationships, we include a dummy variable where being employed is the reference category versus unemployed and not employed, which includes students, retired, homemakers and others. Previous studies also show that subjects from lower social classes and who experience economic distress are less tolerant towards homosexuality (Persell, Green and Gurevich 2001; Andersen and Fetner 2008). To account for this, we also include a variable gauging the respondents' feelings about their household income (from 1 = Very difficult to cope on present income to 4 = Living comfortably on present income). Finally, following Takács et al. (2016) who include in their models a set of variables tapping political orientation and attitudes toward gender roles, our models control for political interest (from 1 = Not at all interested to 4 = Veryinterested); position on left right scale (refusal/don't know as reference, left, centre and right); and agreement with the following statement "Men should have more right to a job than women when jobs are scarce" (from 1 = Strongly agree to 5 = Strongly disagree). At the country-level,² we include GDP per capita (logged), taken from the World Bank (2018), to control for the potential intervening effects of macro-level affluence on attitudes towards homosexuality (see Slenders et al. 2014). Summary statistics for all variables are presented in Table 3 in the "Appendix".

3.3 Model

As our dependent variables are ordinal and respondents (level-1) are nested in countries (level-2), we use ordered logit hierarchical models to test our expectations (Agresti 2010; Gelman and Hill 2006). For hypothesis 1 and hypothesis 2, we use a model that allows us to test the association between individual-level variables and attitudes, as well as whether the variation in attitudes depends on the levels of the ILGA Index and GDP per capita. The model takes the following form:

 $^{^2}$ We acknowledge that other macro level variables could be informative for the study of attitudes towards same-sex relationships. However, given the focus of article on comparing general versus specific attitudes, we decided to restrict the focus on variables that had been already used in previous studies on the topic and that offer a solid insight in attitudes towards homosexuality.

$$P[Y_{ij} \le c] = logit^{-1} (\tau_c - \mu_i)$$
$$\mu_i = \mathbf{x}_i \boldsymbol{\beta} + \eta_j$$
$$\eta_j \sim N(\mathbf{z}_j \boldsymbol{\gamma} \Theta, \sigma_\eta)$$

The dependent variable is indicated by Y_{ij} , which has C = 5 categories (where *c* indicates the categories disagree strongly, disagree, neither agree nor disagree, agree, agree strongly), where *i* indexes the respondents and *j* the countries. The term τ_c represents the thresholds that are in increasing order: $\tau_1 < \tau_2 < ... < \tau_{C-1}$. These are basically the four intercepts separating the adjacent categories as follows: disagreeing from disagreeing strongly, disagreeing from neither disagreeing nor agreeing, neither disagreeing nor agreeing from agreeing, and agreeing from agreeing strongly. The term μ_i is the linear predictor including the vector of individual-level variables $\mathbf{x_i}$, the vector of coefficients $\boldsymbol{\beta}$, and the level-2 random effects η_j , which captures the variation across countries in general attitudes towards gays and lesbians and in the specific attitude towards adoption. The level-2 random effects follow a normal distribution which has as mean a linear combination of \mathbf{z}_j , that is the vector of country-level predictors (the ILGA Index and GDP per capita), and $\boldsymbol{\gamma}$, that is the vector of level-2 coefficients, and has as standard deviation σ_n .

To test hypotheses 3a and 3b, we rely on models with random-coefficients and crosslevel interactions. We let the coefficients of the individual-level variables of interest—age, education, and church attendance—vary across countries one at a time, and we try to capture their variation using cross-level interactions with the ILGA Index.

Given that ordinal logistic models are not easy to interpret (Long 1997), we rely on predicted probabilities, computed at the means of the covariates, discrete changes and graphical summaries to present the results. As the focus of the research is on favorable attitudes towards gays and lesbians, we center our discussion on the probabilities of agreeing and strongly agreeing with the two statements.

4 Results

The distribution of the dependent variables in the 22 countries is presented in Fig. 1, along with the ILGA index for each country. The figure reveals large cross-national variation in general attitudes versus specific attitudes. Starting from the former, we can see that a very low percentage of respondents agrees or strongly agrees with the statement in Russia (11.6% and 3.1%), Lithuania (19.84% and 3.7%) and Hungary (26.8% and 10.7%). On the other side of the spectrum, the highest percentages of respondents who strongly agree with the statement can be found in the Netherlands (68.2%), Iceland (68.1%), France (65.8%) and Sweden (65.7%). In these countries, however, given the very high percentages of respondents who agree strongly, we can notice that simple agreement is lower. The distribution of agreement or strong agreement in attitudes towards adoption is rather similar. Lithuania (5.2% and 0.9%), Russia (3.6% and 1.8%), and Poland (7.2% and 3.9%) are placed at the bottom of the distribution whereas Iceland (29.1% and 61.3%), Spain (29.4% and 45.4%), and the Netherlands (34.6% and 42.9%) are at the top. One thing to notice is that within countries the general item captures more favorable attitudes than the specific one, indicating that adoption by same-sex couples remains a sensitive issue even in countries where subjects display higher support for same-sex relationships in general.

Figure 1 also reports the ILGA index in each country and shows that Russia is placed at the bottom (6.4) followed by Lithuania (17.28) and Poland (18.23). At the top of the

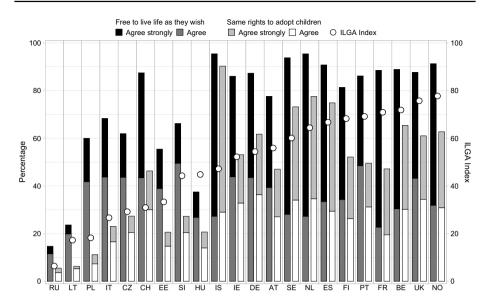


Fig. 1 Distribution of dependent variables—proportion of respondents who agree strongly or agree with the statements: "Gay men and lesbians should be free to live their own life as they wish" and "Gay male and lesbian couples should have the same rights to adopt children as straight couples"—sorted by the levels of the ILGA Index, by country. *Source*: Own calculation on ESS8 data and ILGA data

distribution are Norway (77.74), the UK (75.73) and Belgium (71.86). The distribution indicates that countries that score higher on the ILGA index are also the ones where subjects are more likely to agree or agree strongly with either statement.

4.1 The Role of Micro-level Characteristics

Table 1 reports the results for the ordinal logit multilevel models. Model 1a predicts general attitudes towards gays and lesbians, while model 1b predicts specific attitudes toward adoption. Both models include the same individual- and country-level variables. Starting from the individual level variables of interest, the coefficients in Models 1a reveal a significant association between age ($\beta = -0.295$, $p \le 0.001$), years of education ($\beta = 0.205$, $p \le 0.001$) and church attendance ($\beta = -0.312$, $p \le 0.001$) and the first dependent variable. The coefficients in Model 1b are similar and have the same level of statistical significance. The coefficients for the control variables well reflect previous findings. Women display more favorable attitudes than men towards gays and lesbians in general ($\beta = 0.420, p \le 0.001$) and towards adoption in particular ($\beta = 0.501$, $p \le 0.001$). We do not find a strong association between employment status and attitudes towards homosexuality, while we do show that left-wing oriented respondents are considerably more favourable towards both gays and lesbians generally ($\beta = 0.498$, $p \le 0.001$) and adoption specifically ($\beta = 0.518$, $p \le 0.001$). The results also show that people who live comfortably on their income have more positive attitudes towards homosexuality ($\beta = 0.117$, $p \le 0.001$) and adoption ($\beta = 0.113$, $p \le 0.001$), whereas greater gender egalitarianism is associated with more favourable attitudes towards both items ($\beta = 0.443$, $p \le 0.001$ and $\beta = 0.221$, $p \le 0.001$ respectably).

Table 1 Ordered logit multilevel			
models with country-level random-effects		Free to live life as they wish	Same rights to adopt children
		Model 1a	Model 1b
	Thresholds		
	Disagree stronglyldisagree	-3.208***	-1.435***
	0 00 0	(0.120)	(0.116)
	Disagreelneither	-2.107***	-0.190
	C	(0.118)	(0.116)
	Neitherlagree	- 1.050***	0.730***
	6	(0.118)	(0.116)
	Agreelagree strongly	1.179***	2.265***
	0 0 00	(0.118)	(0.117)
	Fixed effects	. ,	· · ·
	Individual-level		
	Age	-0.295***	-0.384***
	-	(0.012)	(0.012)
	Age-square	-0.014	0.053***
		(0.012)	(0.011)
	Years of education	0.205***	0.125***
		(0.012)	(0.011)
	Church attendance	-0.312***	-0.331***
		(0.011)	(0.011)
	Woman	0.420***	0.501***
		(0.021)	(0.020)
	Main activity (r.c. employed)		
	Unemployed	0.099*	0.072
		(0.049)	(0.046)
	Not employed	0.023	0.075**
		(0.028)	(0.026)
	Political interest	0.135***	0.063***
		(0.012)	(0.011)
	LR scale (r.c. DK or refusal)		
	Left (0/3)	0.498***	0.518***
		(0.041)	(0.039)
	Center (4/6)	0.214***	0.135***
		(0.034)	(0.034)
	Right (7/10)	0.005	-0.220***
		(0.039)	(0.038)
	Feelings about income	0.117***	0.113***
		(0.012)	(0.011)
	Attitudes towards women's roles	0.443***	0.221***
		(0.012)	(0.011)
	Country-level		
	ILGA Index	0.462**	0.495***
		(0.141)	(0.140)
	GDP per capita (log)	0.597***	0.529***
	-	(0.138)	(0.136)

Table 1 (continued)

	Free to live life as they wish Model 1a	Same rights to adopt children Model 1b
Random effects (SD)		
Country-level	0.524	0.519
AIC	82,862	101,851

Entries are log-odds; standard errors in parentheses. Sig: $*p \le 0.05$; $**p \le 0.01$; $***p \le 0.001$. N respondents: 37,133, N countries: 22. Continuous variables are standardized. Figures report the original scales of the variables of interest

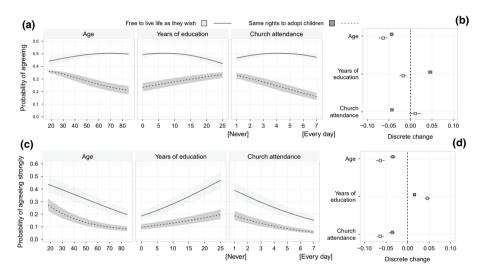


Fig. 2 Predicted probabilities of agreeing or agreeing strongly with "gay men and lesbians to be free to live their own life as they wish" and "gay male and lesbian couples to have the same rights to adopt children as straight couples" by age, years of education and religious attendance (\mathbf{a} , \mathbf{c}) and corresponding discrete changes (\mathbf{b} , \mathbf{d}), with 95% confidence intervals. *Source*: Own calculations on ESS, ILGA and World Bank data

The coefficients from an ordinal model, however, do not allow us to assess the magnitude of these associations and compare their role across the dependent variables. Therefore, we calculate the predicted probabilities of agreeing or agreeing strongly with the statements capturing the general and specific attitudes along the range of the independent variables of interest, that is, age, years of education and church attendance and plot them in Fig. 2a and c. The comparison of the predicted probabilities is meaningful because the estimates are calculated on the same sample. To further ease the interpretation of the results, the discrete changes on the same probability are reported in Fig. 2b and d.³

³ Discrete changes are calculated as first differences in the probabilities of agreeing strongly between 1 standard deviation above the average of the independent variable of interest and its average, holding constant at the mean the other covariates (Long 1997).

Figure 2a and c shows that the slopes of the independent variables differ across the two dependent variables. As age increases, the probability of agreeing (panel a) with the specific statement clearly gets smaller, while this is not the case for the probability of agreeing with the general statement. Slopes are steeper when it comes to the probability of agreeing strongly (panel c); when respondents are about 20 years old, the probability of being strongly in favour of homosexuality in general is about 0.42, it is about 0.30 for those around 50 years old, while it is around 0.20 for respondents who are 80 or older. The probabilities of strongly agreeing with adoption by gays and lesbians are considerably lower: 0.28 when respondents are about 20 years old, 0.12 for those around 50 years old, and about 0.09 for older respondents. The discrete changes in Fig. 2b and d allow a direct comparison of the magnitude of the slopes. One standard deviation increase in age translates into a decrease in the probability of agreeing with the general attitude (panel b) of 0.063 points and into a decrease in the probability of agreeing with the specific statement of 0.043. Similarly, but with a starker difference, we can see that an increase in age is associated with a decrease in the probability of strongly agreeing with the general attitude of 0.063 and into a decrease in the probability of strongly agreeing with the specific statement that is nearly half as large: about 0.034 points.

The results for years of education plotted in Fig. 2a and c follow a similar pattern, but the difference between the slopes is actually larger. We can notice that as education increases, the probability of agreeing with the general statement slightly decreases, while the probability of agreeing with the specific statement increases importantly. This patter is complementary with the one for strong agreement. Respondents who have 5 years of education have a probability of strongly agreeing with adoption by same-sex couples of about 0.10, while respondents with 20 years of education have a probability equal to 0.18. Respondents with the same years of education have a probability of strongly agreeing with the general statement of 0.23 and 0.40, respectively. Therefore, the fact that education has a slightly negative effect of the probability of agreeing with the general statement is likely due to the much bigger role education has on strong agreement. The discrete changes in Fig. 2b and d indicate that the association between years of education and the two dependent variables is, indeed, different.

Finally, the slopes for church attendance also differ between the two dependent variables. The probability of agreeing with the general statement barely changes as church attendance increases, while this is not so in the case of the specific statement. With regard to the probability of strongly agreeing with the general statement, this is about 0.17 for someone who attends church every day and about 0.40 for someone who never attends church. The probabilities of strongly agreeing with adoption are about 0.07 and 0.18 for the two respondents, respectively. Consequently, the discrete change for the general attitude is about -0.071, while for the specific attitude it is -0.045.

Hypothesis 1 is supported by the data. Younger, more educated subjects and those who attend church less frequently display more favorable attitudes towards gay and lesbians both in general and in the specific, in line previous studies (Takács et al. 2016; Whitehead and Perry 2016; Whitehead 2010). However, even respondents who are younger, more educated and secular find it more difficult to accept and display support towards adoption by same-sex couples compared to gays and lesbians in general, perhaps because adoption by homosexual couples is uncommon and not formally recognized all over Europe. Overall, while these results are in line with previous studies addressing the relationship between individual variables and attitudes towards various aspects of same-sex life (Andersen and Fetner 2008; Jäckle and Wenzelburger 2015; Takács et al. 2016), they point out that these variables play a somewhat minor role when it comes to more complex issues about

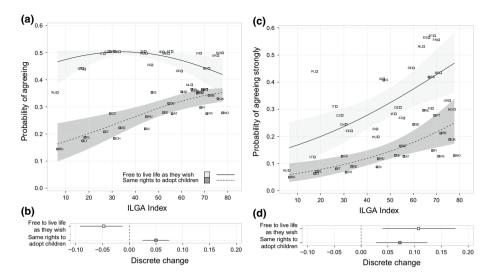


Fig. 3 Predicted probabilities of agreeing or agreeing strongly with "gay men and lesbians to be free to live their own life as they wish" and "gay male and lesbian couples to have the same rights to adopt children as straight couples" by level of the ILGA Index (**a**, **c**) and corresponding discrete changes (**b**, **d**), with 95% confidence intervals. *Source*: Own calculations on ESS, ILGA and World Bank data

same-sex life, such as adoption. In fact, while younger, highly educated and secular citizens may agree to a large extent that gays and lesbians should be free to live their lives as they desire, it is not necessarily true that this positive attitude extends to other aspects.

4.2 The Role of the Macro-level Characteristics

Moving now to the role of the macro-level variable of interest, we can see from Model 1a and Model 1b that the coefficients for the ILGA Index are positive and significant (β =0.462, $p \le 0.01$ and β =0.495, $p \le 0.001$ respectively), indicating that attitudes towards gay men and lesbians in general and attitudes toward adoption by same-sex couples are more positive in countries where policies and laws guarantee human and civil rights to these groups. As expected, GDP per capita also has a positive and significant association with both outcomes. As mentioned, the coefficients are not directly interpretable, so to clarify the role of macro-level acceptance of LGBTI people via the ILGA index we turn our attention to the predicted probabilities (panels a and c) and discrete changes (panels b and d) displayed in Fig. 3.

As can be seen from Fig. 3a agreement with the general statement is high throughout the range of the ILGA index, whereas agreement with the specific statement is considerably higher in countries that score high on the ILGA index. As a result, the probability of agreeing with the two statements converges at the highest levels of the index. In contrast, panel c shows that, as the values of the ILGA index get larger, so do the probabilities of strong agreement for both items. However, the two probabilities do not converge: at the highest values of the index, strong agreement with the general attitude is higher than strong agreement with the specific attitude. Specifically, the probability of agreeing with the general statement (i.e. gay men and lesbians should be free to live life as they wish) is about 0.48 in countries with very low scores on the ILGA Index and 0.42 where policies and

laws guarantee broad recognition of LGBTI rights. In contrast, the probability of agreeing strongly increases from 0.15 to 0.50. Moving to the specific statement (i.e. gays and lesbians should have the same rights to adopt a child as straight couples), the probabilities of agreeing or strongly agreeing are substantially higher in countries with laws and policies granting rights to LGBTI people. For example, the predicted probability of agreeing or agreeing strongly is well beyond 0.30 and 0.20 respectively in countries with high levels of the ILGA Index, such as the Netherlands, Spain or Belgium, while in Russia, a country with a low score on the ILGA Index, the probability of agreeing or strongly agreeing with the specific statement is about 0.15 and 0.05. To better compare the slopes, we turn our attention to the discrete changes in Fig. 3b and d. These indicate that the associations between the ILGA Index and the probability of agreeing with the two statements are different, while they are not in the case of strong agreement. These results, therefore, point out that positive attitudes towards adoption by gay men and lesbians and toward homosexuality in general are more diffuse in contexts that guarantee the human rights of LGBTI people, as found in previous studies (Takács et al. 2016). Contrary to hypothesis 2, the positive role of the context appears to be rather similar for the two attitudes if we look at strong agreement. Furthermore, if we look at agreement with the two statements, we actually find a stronger effect of the macro level context on the specific, rather than the general attitude. Thus, counter to our hypothesis, the macro level does appear to affect the more sensitive issue of same-sex adoption.

4.3 The Micro–Macro Link

Lastly, we move to models including the random-coefficients and the cross-level interaction, which are reported in Table 2, to test our final hypotheses. The interaction terms for age and the ILGA Index are not statistically significant in Model (2a), but they are in Model (2b). This indicates that the presence of laws and policies guaranteeing rights to LGBTI people in Europe does not explain the variation in the coefficients capturing the association between age and general attitudes toward gays and lesbians while it does in the case of attitudes toward adoption by gays and lesbians.

The upper panels in Fig. 4a show the probabilities of agreeing with the statements along the independent variables of interest in contexts with high and low levels of the ILGA Index.⁴ We can notice that the role of such individual-level characteristics is different across contexts and type of attitudes. In contexts where the ILGA Index is higher, older respondents are more likely to agree with the general statement, while in contexts with low ILGA Index scores age seems to not matter. Similar patterns can be seen for church attendance. Eventually, opposed patterns can be found for education. In contrast, the panels at the bottom of Fig. 4a show that the probability of agreeing with the specific statement is not particularly different across contexts (this is also indicated by the discrete differences in Fig. 4b).

However, these results must be interpreted in the light of the other response choice to both items measuring general and specific attitudes, that is strong agreement. In fact, the role of individual-level variables and the context might be different if we consider various responses, in particular because full acceptance (that is strong agreement) might be endorsed by some individuals and in some contexts compared to a milder acceptance.

The upper panels in Fig. 4c show that the role of age for the probability of strongly agreeing with the general statement is quite similar in contexts with high and low scores

⁴ The predicted probabilities and discrete changes of the individual level variables of interest are calculated at one standard deviation below the mean of the ILGA Index and one standard deviation above such mean.

Free to live life as they wish model 2a Same rights to adopt they wish model 2a Same rights to adopt they wish model 3a Same rights to children Same rights children Thresholds -3.210^{***} -1.437^{***} -3.207^{***} -1.427^{***} -1.427^{***} -1.427^{***} Disagreehneiher -2.106^{***} -0.193 (0.12) (0.110) (0.116) Neitherlagree -1.048^{***} 0.730^{***} 0.730^{***} 0.730^{***} 0.730^{***} 0.110^{**} Agredagree strongly 1.18^{***} 2.278^{***} 1.18^{***} 2.238^{***} 0.011^{**} Agredagree strongly 0.123^{**} 0.012^{**} 0.011^{**} 0.011^{**}	Table 2 Ordered logit multilevel models with country-level random-effects, random-slopes and cross-level interactions	els with country-level rand	lom-effects, random-slop	es and cross-level inte	sractions		
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el -0.293^{***} -0.381^{***} -0.298^{***} (0.033) (0.027) $(0.012)-0.011 0.065^{***} -0.298^{***}(0.012)(0.017)$ (0.015) $(0.012)(0.012)$ $(0.012)(0.012)$ (0.012) $(0.012)(0.012)$ (0.012) $(0.012)(0.012)$ (0.012) $(0.011)(0.011)(0.011)$ $(0.011)(0.149)$ $(0.141)(0.140)$ $(0.141)(0.140)$ (0.141)		(0.129)	(0.122)	(0.117)	(0.116)	(0.121)	(0.120)
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Age	-0.293^{***}	-0.381^{***}	-0.298^{***}	-0.385^{***}	-0.299^{***}	-0.390^{***}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.033)	(0.027)	(0.012)	(0.012)	(0.012)	(0.012)
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Years of education	0.210^{***}	0.126^{***}	0.213^{***}	0.117^{***}	0.207^{***}	0.127^{***}
dance -0.317^{***} -0.337^{***} -0.314^{***} . (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.011) (0.014) (0.141) (0.143) (0.143) (0.149) (0.141) (0.141) (0.0535^{***}) (0.468^{**}) (0.608^{****}) (0.608^{**}) (0.608^{**}) (0.608^{**}) (0.608^{**}) (0.608^{**}) (0.608^{**}) (0.608^{**}) (0.608^{**}) (0.608^{**})		(0.012)	(0.012)	(0.027)	(0.024)	(0.012)	(0.012)
(0.012) (0.011) (0.011) 0.520*** 0.566*** 0.456** 0.143) (0.149) (0.141) 0.163) 0.535*** 0.468**	Church attendance	-0.317^{***}	-0.337***	-0.314^{***}	-0.333^{***}	-0.330^{***}	-0.333^{***}
0.520*** 0.566*** 0.456** (0.143) (0.149) (0.141) 0.535*** 0.468** 0.608***		(0.012)	(0.011)	(0.011)	(0.011)	(0.033)	(0.031)
0.520*** 0.566*** 0.456** (0.143) (0.149) (0.141) 0.535*** 0.468** 0.608***	Country-level						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ILGA Index	0.520^{***}	0.566^{***}	0.456**	0.481^{***}	0.468**	0.476^{**}
0.535*** 0.468** 0.608***		(0.143)	(0.149)	(0.141)	(0.142)	(0.147)	(0.147)
	GDP per capita (log)	0.535^{***}	0.468^{**}	0.608^{***}	0.554^{***}	0.567^{***}	0.546^{***}
$(0.112) \qquad (0.150) \qquad (0.138) \qquad (0.142)$		(0.112)	(0.150)	(0.138)	(0.142)	(0.148)	(0.147)

Table 2 (continued)						
	Free to live life as they wish	Same rights to adopt children	Free to live life as they wish	Same rights to adopt children	Free to live life as they wish	Same rights to adopt children
	Model 2a	Model 2b	Model 3a	Model 3b	Model 4a	Model 4b
Cross-level interactions						
$Age \times ILGA$ Index	-0.008	-0.088^{***}				
	(0.032)	(0.026)				
Age-square × ILGA Index	-0.019	-0.034^{*}				
	(0.016)	(0.014)				
Years of education × ILGA Index			0.025	0.070**		
			(0.027)	(0.024)		
Church attendance × ILGA Index					-0.088^{**}	-0.093^{**}
					(0.033)	(0.031)
Random effects (SD)						
Country-level	0.578	0.543	0.521	0.516	0.538	0.533
Age	0.142	0.113				
Age-square	0.056	0.043				
Years of education			0.113	0.098		
Church attendance					0.143	0.135
AIC	82,744	101,705	82,800	101,787	82,707	101,703
Entries are log-odds; standard errors in parentheses. Sig: $*p \le 0.05$; $**p \le 0.01$; $***p \le 0.001$. N respondents: 37,133, N countries: 22. Continuous variables are standardized Control variables are not reported. Figures report the original scales of the variables of interest	The parentheses. Sig: $*p \le 0$ are report the original sc	0.05 ; $**p \le 0.01$; $***p \le 0$ cales of the variables of in	0.001. N respondents: () nterest	37,133, N countries: 22.	Continuous variables	are standardized.

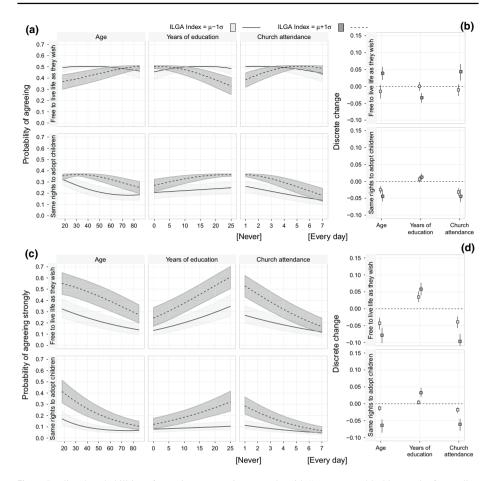


Fig. 4 Predicted probabilities of agreeing or agreeing strongly with "gay men and lesbians to be free to live their own life as they wish" and "gay male and lesbian couples to have the same rights to adopt children as straight couples" by age, years of education and religious attendance (\mathbf{a} , \mathbf{c}) and corresponding discrete changes (\mathbf{b} , \mathbf{d}) conditioning on level of ILGA Index, with 95% confidence intervals. *Source*: Own calculations on ESS, ILGA and World Bank data

on the ILGA Index, as most of the variation is in the level of the probability and not in the slope. Indeed, the confidence intervals of the discrete changes in Fig. 4d overlap. A one standard deviation increase in age corresponds to a decrease in the probability that is similar in different contexts: about -0.05 in a country with a low ILGA Index score and about -0.07 in a country with a high ILGA Index score. In contrast, the slopes capturing the association between age and attitudes toward adoption vary according to the context, as shown in Fig. 4c and d. In fact, the association between age and attitudes toward adoption is negative and significant where the ILGA Index is high, while it is negative but much smaller where the ILGA Index is low. Thus, we can say that age discriminates less when it comes to the specific attitude in contexts where same-sex relationships are discriminated.

The results for the conditional role of the context for years of education follow a similar pattern. Figure 4c and d shows that in contexts with low and high ILGA scores the association between years of education and the probability of strongly agreeing with the general attitude is similar: a one standard deviation increase in years of education corresponds to an increase in the probability of about 0.05 points in both type of contexts. Instead, we note a null association (flat slope) between years of education and attitudes towards adoption in contexts where the ILGA Index is low, and a rather weak association (shallow slope) where the ILGA Index is high. Eventually, the context mediates the role of church attendance for the two attitudes in a similar way. Church attendance, which on average predicts less favourable general and specific attitudes towards gays and lesbians, leads to even less favourable attitudes also in contexts where rights for LGBTI people are granted. This implies that the differences in acceptance among respondents who never attend vs. those who attend church everyday are more marked in countries with higher scores of the ILGA Index than in countries with lower scores, no matter whether the attitudes concern the life of gays and lesbians in general or adoption by same-sex couples. Indeed, the confidence intervals of the discrete changes for church attendance displayed in the upper and lower panels of Fig. 4d do not overlap for either dependent variables. Overall, these results lead us to reject Hypothesis 3a, by which we expected the association between age, education, and religious attendance and general attitudes towards same-sex relationships to be *weaker* in contexts with high scores on the ILGA index. In fact, we find no statistically significant difference between contexts for what concerns age and education, while church attendance is actually more strongly related to the outcome in countries with higher rather than lower ILGA scores. In contrast, we do find support for hypothesis 3b, according to which we expected the association between age, education, and religious attendance and attitudes towards adoption by same-sex couples to be stronger in contexts where there is legal recognition of samesex relationships and weaker elsewhere. Indeed, the association between age, education and religious attendance and the specific attitude is conderably weaker in countries scoring low on the ILGA index than in countries with high scores.

5 Conclusions

This article has relied on two items from the 8th round of data from the European Social Survey (ESS 2016) to compare general and specific attitudes towards LGBTI people in a large pool of countries. Specifically, by applying ordered logit multilevel models, we have tested whether individual characteristics known to be linked with homonegativity in general are also associated with less favourable attitudes towards adoption by same-sex couples. Further, to our knowledge, this is the first contribution to explicitly test whether the association between critical individual-level characteristics (i.e. age, education and religiosity) and attitudes towards homosexuality in general and same-sex adoption in the specific *vary* in contexts with different laws and policies guaranteeing LGBTI rights. We argued that individual-level characteristics with lower levels of legal recognition for gays and lesbians. In contrast, the association was expected to be stronger for same-sex adoption in contexts that are more developed in terms of rights for the LGBTI population.

Our results contribute to the literature by showing that cross-national variation in attitudes towards homosexuality, found in previous studies, is also very much present when it comes to a more specific and potentially sensitive topic: adoption by gay and lesbian couples. Furthermore, our findings indicate that individual-level variables such as, age, education and religious attendance are powerful predictors of both general and specific attitudes. However, we find important cross-national differences across the two indicators that only partially support our hypotheses. Specifically, our results show that individual characteristics matter for general attitudes towards gays and lesbians regardless of the context. In other words, even in countries that are more advanced in terms of LGBTI rights, age, level of education and religiosity are powerful predictors of attitudes towards homosexuality and serve to split up the population in those who accept homosexuality and those who do not. This result suggests that the process by which homosexuality becomes a fully accepted lifestyle is far from being complete even in the most progressive societies. Furthermore, our results show that the more "difficult" issue of adoption by same-sex couples is only supported by a group of forerunners (i.e. youth, higher educated and secular respondents) and only in contexts that are highly developed in terms of rights for LGBTI people. In other words, even in such contexts the issue appears to be too sensitive or "difficult" to fully accrue the support of those who are in principle more likely to approve of it (Bourdieu 1984; Rogers 1962; Treas 2002). Overall, this suggests that when it comes to adoption rights of same-sex couples we are observing the early dawn of the diffusion process: strong support is only present among a selected group of respondents in a selected sample of countries and, eventually, it should spread to the rest of the population.

Overall, our findings are relevant for the scholarly community as well as for the broader public. In the last decades, much previous literature has noted a positive development in the extent to which citizens accept and support homosexuality in general as well as approve of specific issues such as same-sex marriage and, less so, adoption by gay and lesbian couples (Altemeyer 2001; Andersen and Fetner 2008; Brewer and Wilcox 2005; Takács et al. 2016; Whitehead 2010). Scholars noted that, with the sexual revolution of the 1960s and the subsequent cohort replacement, individuals in many Western countries have become gradually more permissive and accepting towards certain behaviours such as cohabitation, nonmarital sex, childbearing out of wedlock, abortion, and eventually homosexuality (Treas et al. 2014). The issue of adoption by same-sex couples, however, is an especially sensitive one. Attitudes towards homosexuality in general may have improved as citizens increasingly view sexual orientation as an individual and private matter that does not affect anyone else except the subjects involved. Adoption, instead, has public externalities because another subject, a child, is involved. Since individuals inevitably call upon their own moral assumptions about what is "best for the child" in this situation, their feelings and attitudes towards this specific issue might be more difficult to change.

These results have several implications. On the one hand, our findings are in line with most previous literature showing a positive link between LGBTI rights at the macro-level and support toward same-sex life (Van den Akker et al. 2013; Jäckle and Wenzelburger 2015; Kuntz et al. 2015). On the other hand, however, we show that support towards adoption by same-sex couples varies considerably among the social groups considered in this article, even among the so-called élites. Hence, our results suggest that even if the process of legal recognition of rights for same-sex couples is on its way in several European countries and many rights have been fully achieved in a few countries as well, citizens' do not display full support towards same-sex relationships. While the proportion of subjects who agree with the statements studied in this research indicate a diffusion of a culture of tolerance, strong agreement is still patchy and relatively low. In other words, despite the increasingly supportive attitudes towards homosexuality in Western countries over the past few decades, the full integration of same-sex family life from a societal and legal standpoint in European countries appears to be currently out of reach. In this respect, greater institutional effort in terms of anti-homophobia campaigns and initiatives could be useful strategies to increase support for gays and lesbians among the general population, especially in light of the homophobic and anti-gender backlash that has emerged in past years in many Western countries (Graff 2014; Kováts 2018; Kuhar and Paternotte 2017).

Appendix

Table 3 Summary statistics

	Mean/proportion	SD	Min	Max
Dependent variables				
Gay male and lesbian couples should have the same rights to adopt children as straight couples				
Disagree strongly	0.204		0	1
Disagree	0.188		0	1
Neither agree nor disagree	0.161		0	1
Agree	0.241		0	1
Agree strongly	0.206		0	1
Gay men and lesbians should be free to live the	ir own life as they wis	sh		
Disagree strongly	0.071		0	1
Disagree	0.078		0	1
Neither agree nor disagree	0.117		0	1
Agree	0.354		0	1
Agree strongly	0.38		0	1
Individual-level predictors				
Age	49.484	17.299	18	85
Years of education	13.222	3.782	0	25
Church attendance	2.459	1.466	1	7
Woman	0.525		0	1
Main activity				
Employed	0.552		0	1
Unemployed	0.052		0	1
Not employed	0.396		0	1
Political interest	2.447	0.908	1	4
Left–right scale				
Don't know or refusal	0.112		0	1
Left (0/3)	0.190		0	1
Center (4/6)	0.476		0	1
Right (7/10)	0.221		0	1
Feelings about income	3.079	0.818	1	4
Attitudes towards women's roles	4.088	1.070	1	5
Country-level predictors				
ILGA Index	48.965	20.785	6.40	77.74
GDP per capita	36,485.085	19,046.492	8748.369	79,887.51

N respondents = 37,133; N countries = 22

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