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> Citation: Kuyper, L., Sommer, E. and Butt, S. (2017). Gender Gaps in the Measurement of Public Opinion About Homosexuality in Cross-national Surveys: A Question-Wording Experiment. International Journal of Public Opinion Research, edx019. doi:
> 10.1093/jpor/edx019

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Gender Gaps in the Measurement of Public Opinion about Homosexuality in Cross-national Surveys: A Question-Wording Experiment

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Acknowledgments
This work was supported by the European Social Survey European Research Infrastructure Consortium (Workprogramme December 2013 - May 2015). A previous version of the current manuscript was presented at the 3rd International ESS Conference in Lausanne (Switzerland), July, 2016.


#### Abstract

Measures of attitudes towards homosexuality in cross-national studies have received criticism for not being 'gender-sensitive'. The current study used a split-ballot design allowing for separate analyses of the attitudes towards 'gay men and lesbian women', 'gay men', and 'lesbian women' in a pooled sample of 3,381 participants from Great Britain, Hungary, and Portugal. Analyses controlling for sociodemographics showed that differences in attitudes towards male and female targets were generally small and did not interact with the gender of the rater. In addition, results showed that men's attitudes towards homosexuality were more strongly related to their gender ideology than women's attitudes. Implications of these findings for cross-national studies measuring attitudes towards homosexuality are discussed.

Key Words: attitudes homosexuality, gender bias, gender beliefs, population attitudes, ESS.


## Gender Gaps in the Measurement of Public Opinion about Homosexuality in Cross-

## National Surveys: A Question Wording Experiment

Large-scale cross-national studies such as the European Social Survey (ESS), the European Values Study (EVS), the International Social Survey Programme (ISSP), the Generations \& Gender Programme (GGP), and the World Values Survey (WVS) are valuable sources of information about country-level attitudes towards homosexuality (e.g., Fitzgerald, Winstone, \& Prestage, 2014; Kuyper, Iedema, \& Keuzenkamp, 2013; Takács \& Szalma, 2013). These surveys provide data on population attitudes towards homosexuality and can be used to compare attitudes across time and countries. Despite widespread use of these items, most of the surveys have, however, received criticism for ignoring potential differences in attitudes towards gay men versus lesbian women or being gender insensitive (Herek, 2000; Loftus, 2001; Takács \& Szalma, 2013; Wellman \& McCoy, 2014). For example, the EVS, GGP, and WVS include items to assess attitudes to homosexuality which refer to homosexuality in general and not to gay men and lesbian women as separate groups. Items referring to homosexuality or homosexuals introduce a potential bias since people mainly think about gay men when confronted with these words (Kite \& Whitley, 1996). The ESS avoids this bias by mentioning gay men and lesbian women explicitly in its attitude item. However, although it mentions both gay men and lesbians and thereby avoids the 'gay male' bias found in the other surveys, by asking about both genders together, the ESS does not allow for an examination of differences in attitudes toward lesbian women and gay men.

The current paper set out to explore possible gender gaps in attitudes towards homosexuality in a pooled sample of British, Hungarian, and Portuguese participants. By using a question wording experiment included in the pre-testing of new items on attitudes to homosexuality for the ESS, it provides new insights into the effects of gender on attitudes to homosexuality and the most appropriate way to measure public opinion on this topic.

## Gender Gaps in Attitudes Towards Homosexuality

Herek (2002) noted that two gender gaps can be found in attitudes towards homosexuality: one related to the rater of the attitude (i.e., male or female participants) and one related to the target of the attitude (i.e., gay men or lesbian women). Generally speaking, men hold more negative attitudes towards homosexuality than women and participants hold more negative attitudes towards gay men than lesbian women (e.g., Herek, 2000, 2002; Kite \& Whitley, 1996; Nierman, Thompson, Bryan, \& Mahaffey, 2007; Takács \& Szalma, 2013; Van den Akker, van der Ploeg, \& Scheepers, 2013). These two gender gaps interact: male raters in particular tend to hold more negative attitudes towards gay men than lesbian women, while the gender gap is smaller for female raters (Herek, 2000, 2002; Kite \& Whitley, 1996; Nierman et al., 2007; Peterson \& Hyde, 2010).

Gender beliefs have been found to explain the gender gaps in attitudes towards homosexuality between male and female raters and targets as well as their interaction (e.g., Herek, 2000, 2002; Kite \& Whitley, 1996; Nierman et al., 2007; Takács \& Szalma, 2013; Van den Akker et al., 2013). Negative attitudes towards homosexual individuals occur because they are perceived to be violating gender norms (beliefs about the appropriate societal roles and behavioral norms for men and women in society) (Kite \& Whitley, 1996; Nierman et al., 2007; Twenge, Carter \& Campbell, 2015; Wellman \& McCoy, 2014). Due to the stricter and more rigid set of beliefs about gender for men (Nierman et al., 2007; Peterson \& Hyde, 2010), and as it has become more common to question the limitations placed on traditional gender roles and norms for women (Guittar \& Pals, 2013; Monto \& Supinski, 2014), gay men face greater social consequences for trespassing traditional gender roles and beliefs and, as a result, are judged more negatively (Oliver \& Hyde, 1993; Wellman \& McCoy, 2014). The stricter roles and beliefs for men also result in heterosexual men taking a firmer negative stance towards homosexuality, especially of other men, than heterosexual
women, perhaps because they have more to lose when traditional gender roles diminish in importance (Guittar \& Pals, 2013; Monto \& Supinski 2014). Furthermore, as Wellman and McCoy (2014) showed, gender beliefs are more important in influencing attitudes towards homosexuality among male targets and raters than among female targets and raters.

The existence and size of the gender gap depends not only on the gender of the rater and the target, but also on the content of the items (Davies, 2004; Herek, 2002; Kite \& Whitley, 1996; Loftus, 2001). For example, in their meta-analysis, Kite and Whitley (1996) showed that the gender gaps were smaller in attitudes towards civil rights for lesbian and gay individuals than for attitudes towards homosexual behaviors or people. There may be a stronger activation of gender beliefs when thinking about homosexual behaviours or people or homosexuality in general, while attitudes towards equal rights are more tied to a set of beliefs about civil rights - beliefs in which men and women vary less than in gender beliefs (Davies, 2004; Herek, 2002; Kite \& Whitley, 1996; Loftus, 2001; Takács, Szalma, \& Bartus, 2016). Kite and Whitley (1996) also provided preliminary evidence that the gender gap in attitudes towards civil rights differs depending on the right at hand, with rights regarding parenting electing larger gender gaps then those regarding free speech. However, the number of studies included in the meta-analysis allowing for a separate analysis of various rights was too small to allow a formal test of these hypotheses.

## The Current Study

Previous research on the gender gap in attitudes to homosexuality has been limited by a reliance on convenience samples (e.g., Davies, 2004) or single-country samples (mostly American) (e.g., Herek, 2000; Loftus, 2001). Cross-national surveys support the rater gender effect, with women's attitudes found to be more positive than those of men, and also show an overall association between gender beliefs and attitudes towards homosexuality (e.g., Fitzgerald et al., 2014; Takács \& Szalma, 2013; Van den Akker et al., 2013). However, due
to the formulation of the cross-national items measuring attitudes towards homosexuality, it has previously been impossible to examine the effect of the target's gender on attitudes. The current study contributes to the knowledge base on potential gender bias in cross-national surveys by fielding a split-ballot experiment with different versions of the original ESS item on attitudes to homosexual lifestyles, and a new ESS item on attitudes towards same-sex parenting rights, comparing attitudes towards lesbian women, gay men, or mixed gender targets (lesbian women and gay men). The research questions guiding the study are whether gender gaps in attitudes towards homosexuality exist (for target and/or rater) and interact, whether this differs according to the context of the item, and whether gender ideology (specifically gender role beliefs about the division of paid work and family duties within society) (Davis \& Greenstein, 2009) show a different association with attitudes towards homosexuality depending on the gender of the rater and target. Based on the literature discussed above, the hypotheses guiding our current study are:

H1: Attitudes towards mixed targets are more negative than attitudes towards female targets

H2: Attitudes towards mixed targets are more positive than attitudes towards male targets

H3: Attitudes towards female targets are more positive than attitudes towards male targets

H4: The differences in attitudes towards female and male targets are larger among male than among female raters

H5: Gender ideology is more strongly related to attitudes towards homosexuality among male than among female raters

H6: Gender ideology is more strongly related to attitudes towards male targets than towards female targets

Given that the literature presents a mixed picture on whether or not gender gaps differ according to the content of the item, we did not formulate any specific hypotheses regarding variation due to the content of the question. When testing the hypotheses, we control for known sociodemographic covariates of attitudes towards homosexuality including years of education, age, and country (e.g., Van den Akker et al., 2013).

## Method

## Procedure

A split-ballot question wording experiment was included in ESS Round 8 pretesting. Data was collected using the face to face TNS International Omnibus in three countries: Great Britain (CAPI), Hungary (PAPI), and Portugal (PAPI) in May/June 2015. These countries were selected since they represent a spectrum of attitudes ranging from a more (GB) to a less (Hungary) positive societal stance towards homosexuality (Kuyper et al., 2013). Participants were selected using quota sampling within randomly sampled areas. The ESS follows strict translation procedures (ESS, 2016). Existing translations of the phrase 'gay men and lesbians' were used and ESS national coordinators were consulted to ensure that the used translations of the terms 'gay men' and 'lesbians' had neutral connotations.

While completing the survey, participants were randomly assigned to receive one of three versions of each question about attitudes towards homosexuality. The three versions differed with respect to the gender of the target group. One version employed the existing combined approach and asked about attitudes to 'gay men and lesbians' (mixed target group, $50 \%$ of the sample), a second asked about attitudes to 'gay men' (male target group, $25 \%$ of the sample) and a third asked about attitudes to 'lesbians' (female target group, $25 \%$ of the sample).

In order to maximize the sample size for analysis (and given that the lack of strict random probability samples restricts the possibility of making valid cross-national
comparisons), participants from the three countries were pooled together yielding a final sample size of 3,381 participants, of whom $44 \%$ were male. The mean age was 48.5 years old ( $S D=18.3$ ) and the mean number of years of education was 12.0 years $(S D=4.7)$. Background characteristics of respondents are shown in Table 1 and are compared to the ESS Round 7 2014/2015 representative samples in each country.

## Measures

Attitude towards homosexuality were measured by two items: ‘[...] should be free to live their own life as they wish' and '[...] couples should have the same rights to adopt children as straight couples' $(1=$ agree strongly; $5=$ disagree strongly $)$. The small number of refusals or 'don't know' responses were coded as missing. All items were recoded with higher scores reflecting more positive attitudes towards homosexuality (range 1-5). A mean scale score was calculated based on both items (Cronbach's alpha $=.70$ ).

Gender ideology was measured by the single-item measure 'When jobs are scarce, a man should have more right to a job than a woman' $(1=$ agree strongly; $5=$ disagree strongly $)$. Higher scores reflected a more liberal gender ideology.

Gender of the rater was a binary variable $(0=$ male; $1=$ female $)$.
Education (in number of years of education; range 0-20), age (in years; range 15-85+) and country of residence $(1=$ Great Britain; $2=$ Hungary; $3=$ Portugal $)$ were included as covariates in all regression analyses (see Table 1 for item wording).

## Analyses

Valid percentages and Chi-square tests provide information about the distribution of the attitude towards homosexuality by gender of the rater and the target. The hypotheses are then formally tested using multiple regression analyses (MRA): First, attitudes towards homosexuality is the dependent variable and the target of the attitude (mixed, lesbian women only, gay men only) is an independent variable (hypotheses 1, 2 and 3), with an interaction
between rater and target gender added (hypothesis 4). Second, attitudes towards homosexuality is the dependent variable and gender ideology is an independent variable with either an interaction term with gender rater (hypothesis 5) or target (hypothesis 6) added to the model. All hypotheses are tested using the combined attitudes scale as well as the separate attitude items. All analyses were conducted with STATA 14.1.

## Results

Table 2 displays descriptives of attitudes towards homosexuality and the bivariate tests of the association between attitude and gender of the rater and between attitude and gender of the target. Levels of positive attitudes are higher for general attitudes towards homosexuality than towards equal rights for adoption and higher among female raters than male. Differences based on the gender of the target were not statistically significant.

## Gender Differences in Targets and Raters

Table 3 shows the results of the MRA examining differences in the mean scale of attitudes to homosexuality for different targets and raters. Male raters held more negative attitudes towards homosexuality than female raters. There was support for hypothesis 1: attitudes were more positive towards female targets than towards mixed targets. However, hypothesis 2 was rejected; the mean level of attitudes did not differ between the mixed gender version and the male version. Model 2 assessed the difference in attitudes towards male and female targets (excluding the mixed gender target group). Attitudes towards homosexuality were more positive for female targets than for male targets, results which confirmed hypothesis 3 . It must be noted that whilst a significant difference was found for female targets (0.10), the differences were small, (as was also illustrated by the bivariate results displayed in Table 2). The interaction added to the MRA in model 3 was nonsignificant, which lead to a rejection of hypothesis 4: The size of the differences between the
ratings of female and male targets was not significantly different among male and female raters.

The analyses shown in Table 3 were also repeated with the separate items for general attitudes to homosexuality and attitudes towards adoption. Similar results were found for both items. For the sake of brevity, the results are not presented here (but are available from the authors upon request).

## Associations with Gender Ideology

Table 4 shows the results for the MRA examining the association between gender ideology and attitudes towards homosexuality measured using the mean scale. Participants who reported more liberal gender beliefs about the division of paid labor in society also reported more positive attitudes towards homosexuality (Model 1 rater). The interaction between gender ideology and the gender of the rater was found to be significant (Model 2 rater). In line with hypothesis 5, the association between attitudes towards homosexuality and gender ideology was found to be stronger among male than among female raters. However, contrary to what was expected, the interaction term between gender ideology and gender of the target (gay men or lesbian women) was not significant (Model 2 target), leading to a rejection of hypothesis 6 .

The analyses shown in Table 4 were also repeated with the separate items for general attitudes to homosexuality and attitudes towards adoption. For the sake of brevity, results are not presented here. Hypothesis 5 was confirmed only in the case of general attitudes towards homosexuality and gender ideology, while hypothesis 6 was rejected for both items.

## Discussion

The current study set out to examine the gender bias in attitudes towards homosexuality as they are often measured in cross-national studies like the ESS. The first and third hypothesis of our study were confirmed: participants hold more positive attitudes
towards female targets (lesbian women) than towards male targets (gay men) or towards mixed targets (gay men and lesbian women). However, hypothesis 2 , suggesting that mixed gender targets yield more positive attitudes than male only targets, was rejected. Attitudes elicited towards homosexuality are the same when asking about 'gay men and lesbian women' or when asking about 'gay men' only. This might be explained by fact that gay men tend to be more well-known and more visible in society and so, even when an item asks about 'gay men and lesbians' respondents are primarily thinking about the former (Kite \& Whitley, 1996).

The current ESS item with the mixed-gender target group may, therefore, present a somewhat incomplete view of attitudes towards homosexuality in Europe. The picture would probably be more positive if respondents were asked about lesbian women. However, as illustrated in Table 2 and 3, the differences in the distribution of responses between the three different versions of the item were small.

Other studies, mainly single-country studies and/or those conducted in the US, have shown an interaction between the gender of the rater and the gap in attitudes between male and female targets (e.g., Davies, 2004; Herek, 2002; Kite \& Whitley, 1996), but based on the data, we have to reject hypothesis 4 which stated that male raters would have a larger gap in attitudes towards targets of different genders than female raters. We do see that men hold more negative attitudes and that the attitudes towards gay men are more negative than towards lesbian women, but the size of this latter difference is the same among male and female raters.

All in all, we conclude that the gender difference in attitudes towards homosexuality is much stronger for the gender of the rater then for the gender of the target and that these gender gaps do not interact. A cautious explanation might lie in the current social context. In all three participating countries, heated societal and political debates have taken place about
equal rights for lesbian and gay couples with same-sex couples living in the UK and Portugal granted the right to marry (since 2014 and 2010, respectively) while the same rights have been denied to those couples living in Hungary (since 2012). As a consequence, gay men and lesbian may increasingly be judged alike, since they have been presented as a single group in these debates. So while male participants still hold more negative attitudes, and lesbian targets are still slightly rated more positively, the gender of the person being rated seems to be becoming less relevant, since people rate them as a group of homosexual individuals (or as the increasingly popular acronym LGBT people: lesbian, gay, bisexual, and transgender people) instead of lesbian women or gay men.

Of the hypotheses concerning the association between gender beliefs and attitudes towards homosexuality, one was confirmed and one was rejected. We indeed saw that the association between gender ideology and attitudes towards homosexuality was stronger among male than among female raters. This is in line with expectations based on previous studies (e.g., Wellman \& McCoy, 2014) and illustrates that men and women might use different frameworks to different degrees when forming their attitude towards homosexuality (see also Ratcliff, Lassiter, Markman, \& Snyder, 2006). However, the effect was not seen for the target of the attitude: the association between gender ideology and attitudes towards homosexuality was the same for attitudes towards lesbian women as for attitude towards gay men. Once again, this might be explained by the lack of a large effect on attitudes depending on the gender of the target, since they are increasingly perceived as one group rather than as separate groups.

Besides the gender biases in raters and targets, we also addressed the question of whether different results were found for attitudes toward homosexuality in general and for attitudes towards equal rights for same-sex parenting. Similar results were obtained for both items. The only difference found between the two attitudes was regarding the interaction
between gender ideology and gender of the rater. Among male raters, the association between the general attitude and gender ideology is stronger than among female raters. For adoption, this effect is not found. This would suggest that gender ideology play a more important role among men than women in shaping their general attitudes towards homosexuality, but both male and female raters make use of gender ideology to the same degree in forming their attitudes towards equal rights for adoption by same-sex couples. This is in line with the findings of Kite and Whitley (1996) that attitudes towards equal rights are less susceptible to gender biases.

## Limitations

The current study has some limitations that should be kept in mind while interpreting the results. A major limitation is the limited measure of gender beliefs available. We were only able to include a single-item measure of a specific gender belief, i.e., gender ideology (a belief about the division of paid labor in society). While this item about the distribution of jobs among men and women in times of scarcity is often used as an indicator for gender beliefs, single-item measures are less reliable than multi-item measures. Also, the results might change if other aspects of gender beliefs besides societal-economic gender beliefs (gender ideology) were included, such as appropriate behavioral expressions (e.g., men should not cry, women should not act tough, etc.). The second limitation is that the data used in this study were obtained using quota samples rather than a random probability sample. Therefore, the current findings cannot be taken as estimates of population prevalence and cannot necessarily be generalized to the population. Nevertheless, despite some small differences when compared to the (random probability based) ESS Round 7 data, the omnibus data were found to be broadly representative of the underlying population with respect to age, gender, education, and attitudes to homosexuality and are deemed of sufficient quality for the type of question testing experiment reported here. Furthermore, many macro-
and micro level covariates related to attitudes towards homosexuality, such as religious denomination or degree of urbanicity (e.g., Fitzgerald et al., 2014; Van den Akker et al., 2013) were not available in the current study. Controlling for these other known covariates might have led to other results. The last drawback of the current study is that only three countries were included in the current study. A larger number of countries would have allowed for an examination of the factors associated with gender gaps in attitudes towards homosexuality on a macro-level.

## Implications

The ESS and other large-scale, cross-cultural studies including measures on attitudes towards homosexuality have been criticized for not taking into account different attitudes towards gay men and lesbians. We conclude that this criticism is partly justified since results in our study were more positive when assessing attitudes towards lesbian women than towards gay men or gay men and lesbian women together. This suggests survey items on attitudes towards homosexuality should be changed to ask about each target group separately. However, we believe there are more reasons to keep the existing formulation. First, the differences between these versions of the items are very limited. Second, general social surveys such as the ESS necessarily cover a broad range of topics which results in limited space to examine all values and attitudes in detail. Since the differences between the item for adoption and the general item were much larger than the differences between attitudes towards gay men vs. lesbian women, scarce questionnaire space might be used more wisely by including several items on attitudes towards homosexuality with different content, and with a more precise focus than the existing ESS item on gay men/lesbians being 'free to live their lives as they wish', than attitudes towards different targets.

The lack of a large gender bias for targets contributes to the validity of the existing survey item(s) measuring attitudes to homosexuality and supports their use as a proxy for
public opinion about homosexuality in policy reports about the living situation of gay and lesbian citizens in Europe or a specific European country. However, policy makers, politicians and others should be aware that results may be sensitive to the specific type of attitude asked about. The item on general attitudes to homosexuality fielded in all ESS rounds might provide a biased (in the positive direction) indication of population attitudes; more negative attitudes were found when asking about equal rights for adoption (an item added to the ESS since Round 8 2016/17). Therefore, the current study stresses the importance of surveys including multiple measures tapping different dimensions of attitudes towards homosexuality if possible.

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Table 1. Characteristics of the British, Hungarian, and Portuguese omnibus and ESS Round 7 samples, 2014/2015

|  | Great Britain |  |  | Hungary |  |  | Portugal |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ESS7 | omnibus |  | ESS7 | omnibus |  | ESS7 | omnibus |  |
|  |  |  | $\mathrm{X}^{2} / t$ |  |  | $\mathrm{X}^{2} / t$ |  |  | $\mathrm{X}^{2} / t$ |
| gender (\%) |  |  |  |  |  |  |  |  |  |
| male | 48.4 | 48.4 | 0.0 | 46.5 | 39.0 | $16.03 * * *$ | 47.0 | 44.8 | 1.16 |
| female | 51.6 | 51.6 |  | 53.5 | 61.0 |  | 53.0 | 55.2 |  |
| age ( $M, S D$ ) | 47.1 | 47.4 | 0.38 | 48.8 | 52.8 | $6.05^{* * *}$ | 49.1 | 45.5 | -4.70 *** |
|  | (18.6) | (20.4) |  | (18.3) | (16.8) |  | (19.4) | (17.4) |  |
| education ( $M, S D$ ) | 13.9 | 14.5 | 3.56 *** | 12.0 | 12.4 | 2.80 ** | 9.1 | 9.8 | $3.86 * * *$ |
|  | (3.7) | (4.5) |  | (3.6) | (3.8) |  | (5.0) | (4.7) |  |
| Attitude towards | 4.2 | 4.3 | 1.23 | 3.3 | 3.6 | $4.71 * * *$ | 4.0 | 4.1 | $3.59 * * *$ |
| homosexuality | (0.9) | (0.9) |  | (1.3) | (1.5) |  | (1.1) | (1.1) |  |
| ( $M, S D$ ) |  |  |  |  |  |  |  |  |  |
| $N$ | 2,194 | 948 |  | 1,663 | 1,200 |  | 1,265 | 1,276 |  |

[^0]Table 2. Descriptives of the attitudes (percentages of participants with [strongly] positive attitudes) and bivariate associations with gender rater and gender target, 2015

|  | total |  | $\mathrm{X}^{2}$ gender | $\mathrm{X}^{2}$ gender |  |
| ---: | :---: | :---: | :---: | :---: | :---: |
|  | sample | men | women | rater | target |
| free to live life |  |  |  |  | 6.71 |
| gay and lesbian version | 73.6 | 71.5 | 75.4 | 3.30 |  |
| lesbian version | 77.9 | 76.3 | 79.1 | 4.22 |  |
| gay male version | 74.0 | 71.6 | 75.8 | 1.95 |  |
| equal rights for adoption |  |  |  |  | 5.82 |
| gay and lesbian version | 40.8 | 37.1 | 43.7 | $7.75^{*}$ |  |
| lesbian version | 43.9 | 39.7 | 47.2 | $8.97^{*}$ |  |
| gay men version | 38.2 | 32.3 | 42.9 | $9.33^{* *}$ |  |
| $N$ | 3381 | 1486 | 1895 |  |  |

[^1]Table 3. Gender differences for targets of attitudes (mean scale scores), 2015

|  | $M_{\text {adj }}$ | $S D$ | $\beta$ | $t$ |
| :---: | :---: | :---: | :---: | :---: |
| model 1 |  |  |  |  |
| gender target |  |  |  |  |
| male and female target (ref.) | 3.46 | 0.03 | - | - |
| male target | 3.42 | 0.04 | -. 02 | -0.92 |
| female target | 3.56 | 0.04 | . 04 | $2.13 *$ |
| gender rater |  |  |  |  |
| male (ref.) | 3.32 | 0.03 | - | - |
| female | 3.60 | 0.02 | . 12 | $7.44^{* * *}$ |
| $N$ | 3355 |  |  |  |
| model 2 |  |  |  |  |
| gender target |  |  |  |  |
| male target (ref.) | 3.43 | 0.04 | - | - |
| female target | 3.56 | 0.04 | . 06 | $2.62^{* *}$ |
| gender rater |  |  |  |  |
| male (ref.) | 3.32 | 0.04 | - | - |
| female | 3.63 | 0.04 | . 13 | $5.91{ }^{* * *}$ |
| $N$ | 1622 |  |  |  |
| Model 3 |  |  |  |  |
| gender target |  |  |  |  |
| male target (ref.) | 3.43 | 0.04 | - | - |
| female target | 3.65 | 0.04 | . 07 | $2.19{ }^{* * *}$ |
| gender rater |  |  |  |  |
| male (ref.) | 3.32 | 0.04 | - | - |


| female | 3.63 | 0.04 | .15 | $4.58^{* * *}$ |
| :--- | :---: | :---: | :---: | :---: |
| target*rater |  |  | -.03 | -0.61 |
| male target*male rater | 3.23 | 0.06 |  |  |
| female target*male rater | 3.40 | 0.05 |  |  |
| male target*female rater | 3.58 | 0.05 |  |  |
| female target*female rater | 3.69 | 0.05 |  |  |

[^2]Table 4. Associations between attitudes towards homosexuality, gender ideology, and gender of rater/target, $N=3295$, 2015

|  | rater |  | target |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\beta$ | $t$ | $\beta$ | $t$ |
| model 1 |  |  |  |  |
| gender of rater/target | - | - | - | - |
| male (ref.) | .11 | $6.78^{* * *}$ | .06 | $2.73^{* * *}$ |
| female | .13 | $7.49^{* * *}$ | .15 | $5.99^{* * *}$ |
| gender ideology |  |  |  |  |
| model 2 |  |  |  |  |
| gender of rater/target | .20 | $4.14^{* * *}$ | .11 | 1.58 |
| male (ref.) | .17 | $6.72^{* * *}$ | .18 | $5.26^{* * *}$ |
| female |  |  |  |  |
| gender ideology | -.11 | $-2.06^{*}$ | -.05 | -0.75 |

Note. Data source: European Social Survey omnibus testing 2015 (pooled sample). Mean scale based on two items: 'gay men and lesbians/lesbians/gay men should be free to live their own life as they wish' and 'gay men and lesbians/lesbians/gay men couples should have the same rights to adopt children as straight couples' (coded as $1=$ disagree strongly; $5=$ disagree strongly). Gender ideology were measured by the item 'When jobs are scarce, a man should have more right to a job than a woman' (coded as $1=$ disagree strongly; $5=$ agree strongly). Analyses controlled for gender target/rater, age, years of education, and country of residence.

* $p<.05$; ** $p<.01 ; * * * p<.001$.


[^0]:    Note. Data source: European Social Survey omnibus testing 2015 and European Social Survey Round 7 data edition 2.1 (2014/15). Gender was entered by the interviewers, age was measured by the question 'In what year were you born?' (calculated), years of education was measured by the question 'About how many years of education have you completed, whether full-time or part-time? Please report these in full-time equivalents and include compulsory years of schooling'. Attitude towards homosexuality was measured by the item 'Gay men and lesbians should be free to live their own life as they wish' (coded as $1=$ disagree strongly; $5=$ agree strongly). Omnibus results for this item based on the $50 \%$ sample that received the mixed gender item. The British samples (Northern Ireland not included) include participants 16 and older, Hungarian samples $=18$ and older, Portuguese samples $=15$ and older. Post-stratification weights applied to the ESS7 data. ${ }^{* *} p<.01 ;{ }^{* * *} p<.001$.

[^1]:    Note. Data source: European Social Survey omnibus testing 2015 (pooled sample). First attitude was measured by the item 'gay men and lesbians/lesbians/gay men should be free to live their own life as they wish', the second attitude by the item 'gay men and lesbians/lesbians/gay men couples should have the same rights to adopt children as straight couples' (coded as $1=$ disagree strongly; $5=$ agree strongly).

    * $p<.05 ;$ ** $p<.01$.

[^2]:    Note. Data source: European Social Survey omnibus testing 2015 (pooled sample). The mean scale was based on two items: 'gay men and lesbians/lesbians/gay men should be free to live their own life as they wish' and 'gay men and lesbians/lesbians/gay men couples should have the same rights to adopt children as straight couples' (coded as $1=$ disagree strongly; $5=$ agree strongly). Analyses corrected for age, education, and country of residence.

    * $p<.05 ; * * p<.01 ; * * * p<0.001$

