

Intergenerational transmission of homophobia

A study on the parents influence of the acceptance towards homosexuals

August Hörlén

August 22, 2018

Abstract

Previous studies are divided in the question if there exist an intergenerational transmission of homophobia, whereas some have found a weak or no relationship, while others found a positive relationship. This paper uses the epidemiological approach by Fernandez (2010). The method regress second generation immigrant on ancestral country values. The main idea of the method is to identify the effects of culture throughout exploration in economic outcomes of individuals who share similar institutional and economic environment, while the social beliefs differ. The level of democracy is used to proxy the attitude against homosexuals in the parents birth country, since previous studies have proven a strong relationship between the two. The results are that there exist a significant transmission from the father to the child, while the relationship is not significant from mother to child. Furthermore a series of robustness test are perform to ensure the validity of the estimate.

Keywords: Intergenerational transmission, homophobia, epidemiological approach.

Contents

1	Introduction	1
2	Empirical strategy	4
3	Data descriptives	5
3.1	Attitude against homosexuals	6
3.2	Parents' attitude against homosexual	6
3.3	Control variables	6
3.4	Additional controls	10
4	Results	11
4.1	First results	11
4.2	Parental characteristics	15
4.3	Ancestral country characteristics	17
4.4	Mother v.s. Father	19
4.5	Cut off	21
4.6	Male v.s Female	21
5	Conclusion	23
6	References	24
7	Appendix	28

List of Tables

1	Descriptive statistics	9
2	Descriptive statistics	11
3	VIF values for regression 2	12
4	First regressions	14
5	Regression on parental characteristics	16
6	Regression on ancestral characteristics	18
7	Comparison between mother father	20
8	comparison between high vs low	21
9	Comparison between gender	22
10	White's test	28
11	VIF values for regression 4	28

List of Figures

- 1 Scatter plot over the average attitude against homosexuals in fathers birth country and the level of democracy in fathers birth country . . . 2
- 2 Graph over the fractions of Polity2 divided by mother and father. . . 7

Acknowledgement

I would like to thank my supervisor Erik Wengström for his help. I would also like to thank team Alpha for two fantastic years in Lund.

1 Introduction

2014 Lee Badgett performed a case study in association with the World Bank on the situation of lesbian, gay, bisexual, and transgender (LGBT) people in India. The background of the study was to develop a model to calculate the economic cost of stigma, the negative attitudes against LGBT-people and the exclusion of LGBT-people in institutions. Example of these institutions can be employment, healthcare, families and education. The human rights and equality for LGBT are normally considered in aspects of ethics, social and culture, however Badgett (2014) argues that it is a economic development issue. The result of the model links economic development and exclusion through four cases, the first one is seen that there exist a lower output and lower productivity due to the employment discrimination and the constraints on labour supply; second, investment in human capital is insufficient as a result of lower returns on education and discrimination settings; third output is lost due to health disparities linked to exclusion; fourth and last, the social and health service are required to address the effects of exclusion that can be better spent elsewhere.

The estimated cost of stigma and exclusion are calculated to be around 0.1 - 1.7 % of GDP, however Badgett (2014) states that it is hard to quantify all the cost due to insufficient previous research. Around 56 % of the LGBT white-collar worker reported that they have been discriminated at their work. Kothis ¹ earn on average below \$70/month and 66 % of the gay men in Chennai earn below \$1.5/day (Chakrapani et al. 2007). Around 28 % of lesbians reported that they experience abusive violence within the family and depression for homosexual men are approximately 6-12 times higher than an average man, where the rate are at 4.5 %. People with suicidal thoughts are around 2.1 % in India and for LGBT-people the rate is around 7-14 times higher. The estimated cost of homophobia, calculated though disability-adjusted life years (DALYs), presents a health cost of \$184 million to \$8.8 billion and labour related costs to be around \$300 million to \$13.7 billion (Badgett, 2014).

Studies have shown that LGBT-people opt out certain professions and workplaces as a result of their sexual orientation (Colgan, Creegan, McKearney & Wright 2007, Schneider & Dimito 2010, Lehtonen 2002, 2004, 2010, 2016, Chen & Keats 2016). That LGBT-people choose not to professions that involves children is something usual, as a result of the fear of being accused of paedophilia (Lehtonen 2016, Chen & Keats 2016, Willis 2012, 2014, Schneider & Dimito 2010). Lehtonen (2004) states

¹A kothi, is a gender in the culture of the Indian subcontinent, is an effeminate man who takes on a female gender role in a homosexual relationships (Reddy & Nanda, 2009).

an example of a young LGBT-man in Finland that was an educated teacher, that in a early stage of his career choose to focus on adult learning instead of child education. A result of this is that LGBT-people are hampered in their work life and a profession were no interaction with other people, such as online jobs, are preferred, due to the independence of other individuals acceptance.

The consequences and cost of homophobia is great, therefore it is interesting to see how homophobia is spread and transferred. I will investigate how second generation immigrants' attitude against homosexuals are affected on the level of democracy in the parent's birth country. In the data set used for this paper there there is a strong positive correlation between the level of democracy and average attitude towards homosexuals, see graph 1.

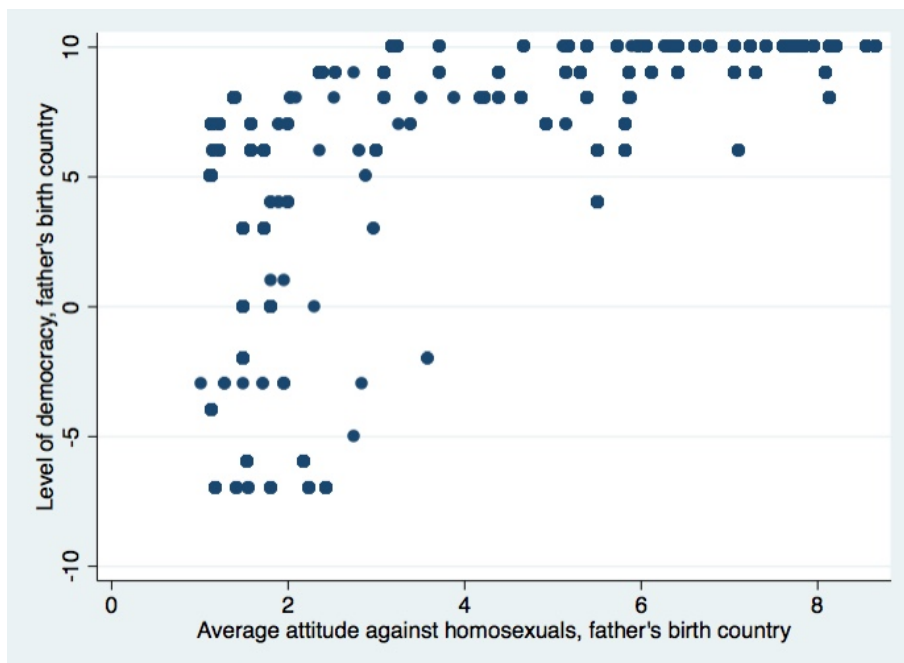


Figure 1: Scatter plot over the average attitude against homosexuals in fathers birth country and the level of democracy in fathers birth country

To use the level of democracy in parent's birth country as a proxy is something that never been tested before. The most natural approach would be to use the attitude of parent's attitude and proxy that by the average attitude against homosexuals in the parent's birth country. The relationship between government system and homosexual right is something that is strongly linked (Encarnación, 2014). Encarnación (2014) stated that gay rights are not found in every democracy, however they are non-existing in non-democracies. A prerequisite for gay rights to exist in democracies is the possibility to have a free opinion, the existence of courts and party systems. Adamczyk (2017) wrote in her study that individuals who live in

democracies get exposed to new perspective and hence have an increased tolerance. The freedom of speech have a huge impact on the attitude against homosexuals, whereas countries with freedom of speech give the opportunity for the residents to express themselves freely. The individuals become more inclined to speak up for others and themselves. The level of democracy is not influenced by child, since she/he was born in a different country. Hence, the issue of reverse causality is mitigated. Since the parent was born and grew up in the country of origin, thereby influenced by its parents and the institutions. The hypothesis in this paper are that there exist a transmission between the immigrant parents and their children, that can be estimated through the level of democracy in parents home country.

Previous research have shown that there exist an affinity of the attitudes between a parent and its child (Acock & Bengtson, 1980; Dalhouse & Frideres, 1996; Jennings & Niemi, 1981; Miller & Glass, 1989). However, the research of transmission of prejudiced are divided if there exist such relationship. Studies of Towles-Schwen and Fazio (2001), Aboud and Doyle (1996) and Branch and Newcombe (1986) exhibits a weak or no relationship of prejudice between the parents' and its children. Nevertheless, studies have found a strong affinity between children and parents' prejudice, such as prejudice against homosexuals, overweight and black people (O'Bryan, Fishbein & Ritchey, 2004; Duriez & Soenens, 2009; Rodríguez-Garcia & Wagner, 2009; Dhont, Roets & Van Hiel, 2013; Meeusen, 2014; Meeusen & Dohnt, 2015), whereas the studies of Meesuen & Dohnt (2015) and Dhont, Roets & Van Hiel (2013) found a positive relationship. Degner and Dalege (2013) performed a study using data from 131 different studies and supported the positive relationship. O'Bryan, Fishbein and Ritchey (2004), Degner and Dalege (2013) and Meeusen and Dohnt (2015) presented a resemblance between the parents view on homosexuals and their children. These studies emphasises the relevance of parental attitudes in the context of children's formation of prejudices and the formation of homophobia. Stotzer (2009) performed a study to investigate the violence against transgender people with data from USA. She found that violence against transgender people starts early in life and emphasises the importance of parental influence on attitudes against LGBT people. Children who were constantly influenced of negative parental attitude against homosexuals had a much more negative attitude themselves (Worthen, 2012)

The method used in this paper are the epidemiological approach by Fernandez (2010). The method implies that a regression on the individuals outcomes on ancestral country values are made. The main idea of the method is to identify the effects of culture throughout exploration in economic outcomes of individuals who share similar institutional and economic environment, while the social beliefs dif-

fer. The main idea reminds of the approach used by epidemiologists, that attempts to determine the affect of genetics have on diseases from the various health outcomes and physical environment contribution, for immigrants and compare them with natives (Fernandez, 2010). Similar methods have been applied to various areas and found strong cultural ties that effects, general trust (Ljunge, 2014), youths mobility (Alesina and Giuliano, 2010), explaining women’s labour supply and fertility (Alesina and Giuliano, 2010; Fernández and Fogli, 2006, 2009). Alesina and Giuliano (2011) estimated the political participation in Europe and Luttmer and Singhal (2011) studied the effect of culture on redistribution.

While the epidemiological approach are most applied to data of immigrants in the USA, Ljunge (2014), Alesina and Giuliano (2011) and Luttmer and Singhal (2011) used data from the European social survey (ESS), which also will be the core data of this paper.

2 Empirical strategy

In order to estimate the effect that ancestral culture might have on an individuals attitude against homosexuality I will primary employ the Ordinary least square (OLS) estimator which is presented in equation 1. The dependent variable AAH_i , attitude against homosexuals, is a categoric variable, since it can only take the values, 0, 0.25, 0.5, 0.75 and 1. Hence, an Orderd probit model are normally used, which account for the categorical values and does not allow to obtain probability outside the bound. This was performed and the results compared to the OLS estimates was similar, hence only the OLS regressions are presented to conserve space.

$$AAH_{icat} = \alpha + \beta_1 Polity2_a + \beta_2 X_{icat} + \gamma_{ct} + \varepsilon_{icat} \quad (1)$$

where AAH_{icat} is the dependent variable and captures the attitude against homosexuals for individual i , resident of country c , with a parent born in country a , where $a \neq c$, for in period t . $Polity2_a$ refers to the level of democracy in country a , whereas the same level of democracy is obtained for individuals with parents born in country c . X_{icat} seize different economic and demographic controls that might effect the individuals attitude towards homosexuals. γ_{ct} are country-, and time-invariant unobserved country-by-year fixed effects ε_i is the error term, where $i = 1, 2, \dots, n$ and $\varepsilon_1, \varepsilon_2, \dots, \varepsilon_n$ are IID $(0, \sigma^2)$

The advantages of epidemiological approach is that the measure of parents' attitude is not endogenous to individual i 's attitude against homosexuals, a problem that occurs when using survey data for the whole family, e.g. Meeusen and Dohnt (2015) which asked both parents and their children about different prejudice, including anti-gay attitudes, in order to estimate the intergenerational transmission. A concern when analysing self-reported surveys of both parents and children, is that a negative experience of the child that can lessen his/her attitude towards homosexuals. Which arise concerns about reversed causality, since the abate experience of the child in turn can affect the parents attitude. When applying the method of epidemiological approach it avoids any potential problems of reversed causality, by measuring level of democracy in ancestral country instead. The country-by-year fixed effects, γ_{ct} , accounts for any unobserved differences and institutional structure in country c in year t , that might affect attitude across time and country. Misleading background factors are a concern, hence a rich set of individual control variables in X_{icat} are added.

Condition that all above is for filled, a significant estimate of β_1 would imply an impact of the ancestral country on the individuals' attitude against homosexuals and not the other way around.

3 Data descriptives

The data used in this paper are from the European social survey (ESS). The surveys are performed in waves of every two year in a variety of European countries and collects information about individuals attitudes, beliefs, behaviour patterns and with demographic variables.

The data set contains information about the respondent's birth country as well for his/hers parents birth country. I use data from 2004 to 2016, e.g. wave 2 to 8, the first round cannot be used since it only answers which continent the parent are born in and not country, something that is essential to perform some kind of a fair analysis. The data set that will be used only contains individuals who have either, a mother or father whom are born in a different country than the individual itself. The number of observations in the data set are 28 357, from 35 different countries, with 202 different ancestral countries, which lessens the concern that the effects are only driven by one individual country.

3.1 Attitude against homosexuals

The individual attitude against homosexuals are captured from question 34 in the ESS data set. The question that the respondents answered was following, "Do you agree with the following statement? Gay men and lesbians should be free to live their own life as they wish", where 1 corresponds to Agree strongly and 5 to Disagree strongly. To ease the interpretation I reversed it so that 1 equals disagree strongly and 5 agrees strongly and normalised it. The variable that is used are bounded between 1, 0.75, 0.5, 0.25 and 0, whereas 1 corresponds to agree strongly and 0 disagree strongly. A higher value of the variable implies a higher acceptance towards homosexuals and indicates stronger agreement with the statement that gay men and lesbians should be free to live their lives as they wish. This will be the dependent variable for this analysis and to conserve space the variable will be called AAH, attitude against homosexuals. The average attitude in the data set is 0.697 and the number of observations are 27 124, see table 1

3.2 Parents' attitude against homosexual

As mention before a proxy for the parents attitude against homosexuals will be the level of democracy in the parents birth country. As the measurement of democracy Polity2 will be used. Polity is a data set data has roots from the 60s with the main idea to study the effects of regime authority and monitoring regime change (Polity IV, 2017). Polity2 describes the level of democracy in over 150 countries. The variable are coded from -10 to +10, whereas -10 to -6 are autocracies, -5 to 5 equals anocracies and 6 to 10 are democracies. Table 2 presents that the average polity2 score for mothers birth country are 5.81, which implies that the average country is just above the anocracies line. For the fathers country of birth the average 5.6 which is similar to the mothers. The score of Polity2 for the respondents birth country are on average 8.7 and a range form 6 to 10. This implies that all the respondent have been born in a country were democracy have been present.

Graph 2 presents the distribution between the level of democracy in father's and mother's birth country and it can be seen that the distribution between the two are similar.

3.3 Control variables

When performing any kind of analysis confounding factors are always a potential problem, hence an extensive set of individual control variables are added to the

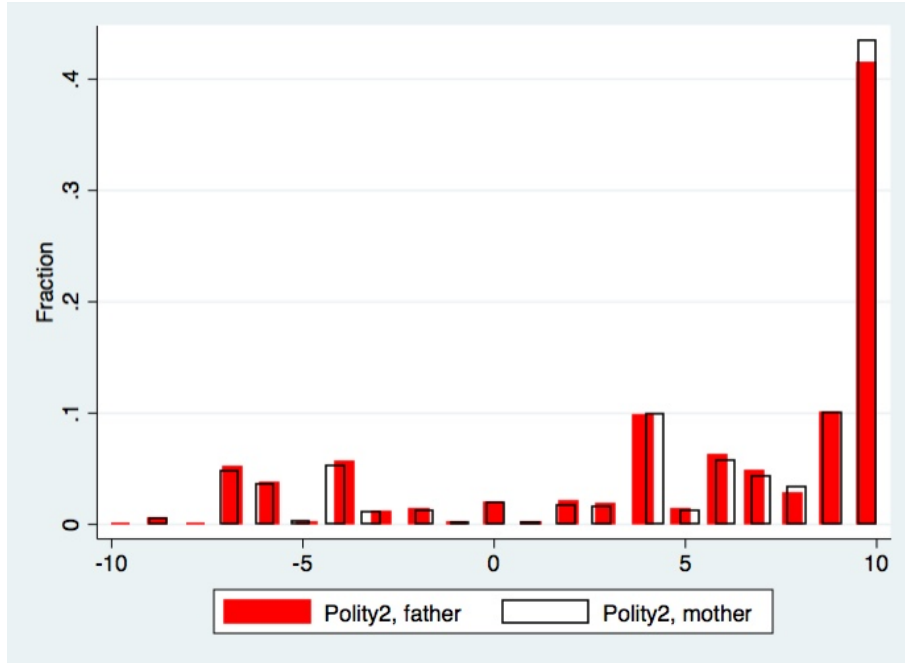


Figure 2: Graph over the fractions of Polity2 divided by mother and father.

model. By adding a rich set of control variables it increases the probability of obtaining the causal effect of ancestral transmission on homophobia.

The variable Male reveals the respondents gender and are coded as a dummy variable, whereas 1 is if the respondent are male and 0 if female. It can be seen in table 1 that the data set contains around 45 % males. Moskowitz, Rieger and Roloff (2010) obtained the result that men tend to be more homophobic than women, hence, gender are added to the model. The variable age answers how old the respondent was at the time the survey was filled in. The ages for the sample are from 14 to 102 with an average age of 44. Age is added as a control since research have shown that it tends to correlate with homophobia (Johnson et al, 1997). It is not certain that age have an linear relationship with attitude against homosexuals, thus age squared are added to allow for a non-linear relationship. The coefficient of age are expected to be positive. If the respondent are employed or not are answered by the dummy variable Unemployed, where the question was as follow; "Which of these descriptions applies to what you have been doing for the last 7 days?" whereas the respondent checked "Unemployed". The variable is coded so that 1 corresponds with being unemployed and 0 holding a job, studying, military service or being retired. The unemployment rate for the sample is around 5 %.

To capture the level of education of the respondent two dummy variables were constructed, upper secondary school and tertiary degree. The question was asked in following "What is the highest level of education you have successfully completed?".

The tertiary degree is equivalent to International Standard Classification of Education (ISCED), of 6, 7 and 8 from the ISCED 2011, which the ESS rounds, 5, 6, 7 and 8 corresponds to (Eurostat). The rounds of 2, 3 and 4 measure tertiary education by corresponds with ISCED 5 and 6 by the 1997 standard. If the respondent have a university degree by the conditions above the variable tertiary will equal 1 and 0 if not. For upper secondary school by the 2011 ISCED standard equals to 3, 4 and 5 while the 1997 equals to ISCED 3 and 4, where the variable is a dummy and 1 corresponds to having a upper secondary degree as the highest successfully completed education. The individuals who have a lower degree than upper secondary school are the reference for these dummies. Table 1 presents that around 47,6 % of the individuals in the sample have upper secondary degree as the highest level of successfully completed education. The percentage of the individuals who have a tertiary degree as the highest completed are around 19,2 %.

Low income levels are associated with more negative attitude towards homosexuals according to Herek (2002), but income levels also reveals socio-economic status of the individual which is an important factor when conducting a model that want to distinguish cultural hesitance (Guiso et al, 2006). To control for different income levels two dummies were constructed, Low income and Medium income.

Since income levels are different across countries I divided them in income decile by country specific incomes, where the low income variable represents the four lowest out of 12 income decile in the response card for ESS rounds 2, 3 and 4. For ESS rounds 5, 6, 7 and 8 there were only 10 possible income options, therefore the three lowest options corresponds to the lowest income decile. For the medium income in ESS rounds 2, 3 and 4 are the four middle options and for ESS rounds 5 to 8 the three mid options that answers if an individual are in the mid income decile. Hence, the variables are dummies 1 corresponds that the individual belonging to the group and 0 equals not. The advantage of using income decile instead of actual net income is since income level differs across countries. In table 1 it is presented that around 30,6 % of the sample population are in the low income deciles and 41,1 % belongs to the medium income deciles.

Studies have shown that there are a strong linkage between religious believes and attitude against homosexuals (Herek, 2002; Barnes & Meyer, 2012; Balkin, Schlosser & Heller Levitt, 2009). The religions that are added as controls are Roman Catholic, Protestant, Eastern Orthodox, Islamic and Jewish, where atheist or non-believer are reference. In table 1 is can be seen share of individuals who are Catholic are around 18,8 %, Protestant 7,21 %, Orthodox 10,3 %, Muslims 4,62 % and around 15,61 % are of Jewish beliefs. The respondents who answered that they do not belong to

Table 1: Descriptive statistics

VARIABLES	N	Mean	SD	Min	Max
AAH	27,124	0.697	0.312	0	1
Polity2 <i>mother</i>	13,485	5.817	5.590	-9	10
Polity2 <i>father</i>	14,233	5.606	5.652	-10	10
Polity2 <i>respondent</i>	19,901	8.716	1.559	6	10
Male	28,335	0.457	0.498	0	1
Age	28,222	44.46	18.01	14	102
Age squared	28,222	2,301	1,712	196	10,404
Unemployment	28,357	0.0524	0.223	0	1
Upper secondary	28,199	0.476	0.499	0	1
Tertiary	28,199	0.192	0.394	0	1
Low income	20,649	0.306	0.461	0	1
Medium income	20,649	0.411	0.492	0	1
Catholic	28,357	0.188	0.390	0	1
Protestant	28,357	0.0721	0.259	0	1
Orthodox	28,357	0.103	0.304	0	1
Islam	28,357	0.0462	0.210	0	1
Jewish	28,357	0.1561	0.3629	0	1

any religious believes are around 43 %.

3.4 Additional controls

A concern that arises is that parent who emigrate from countries with high acceptance towards homosexuals have different characteristics, therefore, I will control for parents education, if parent worked when respondent was age 14. By doing so I can distinguish the effect of having high educated parents compared to low educated parents. In the line of Herek (2002), that low income individuals have a more negative attitude against homosexuals and that there exists an effect of intergenerational transmission for homophobia. Given this, there should exist a difference in attitude for individuals whose parental education differs. Around 17,9 % in sample population have a father with a university degree and 13,6 % have a mother with equivalent degree, see table 2. Another parental characteristics I have added are if parent worked when respondent were at age 14, divided by mother and father. The question that was asked followed; "When you were 14, did your mother work as an employee, was she self-employed, or was she not working then?". The variable is coded as a dummy, whereas 1 equals employee or self-employed and 0 if mother was not working, dead or absent. The same question was asked about the fathers employment status. In the data set around 62,5 % had a working mother at age 14 and the share who had a father working at age 14 was 85,5 %, see table 2. If the individual had a parent who did not work at the age 14 it would imply that the parent spent more time with the individuals and had more time to affect the child.

A threat to the estimate of the intergenerational transmission of attitude against homosexuals, is that other characteristics of the birth countries are correlated, which might misled the estimate. Further parent's country specific characteristics are added, such as the average labour force participation rate (LFP) for females in parents birth country (World Bank). As well the natural logarithm of the gross domestic product (GDP) are added as a control for both father's and mother's country of birth (World Bank).

Table 2: Descriptive statistics

VARIABLES	N	Mean	SD	Min	Max
Tertiary <i>mother</i>	25,828	0.136	0.342	0	1
Upper secondary <i>mother</i>	25,828	0.455	0.498	0	1
Tertiary <i>father</i>	23,870	0.179	0.383	0	1
Upper secondary <i>father</i>	23,870	0.457	0.498	0	1
Mother worked at age 14	27,629	0.625	0.484	0	1
Father worked at age 14	26,759	0.855	0.352	0	1
LFP <i>mother</i>	16,315	45.40	14.15	6.084	87.42
LFP <i>father</i>	17,366	44.59	14.32	6.084	87.42
log(GDP), <i>mother</i>	16,168	9.332	1.141	4.848	12.10
log(GDP), <i>father</i>	17,197	9.260	1.130	4.848	12.10
log(GDP), <i>respondent</i>	28,309	10.22	0.786	7.221	11.53

4 Results

A regression was performed on the model specified in equation 1 and the estimation results are presented in table 4. A White test has been performed and we determine that there exists unrestricted heteroskedasticity in our model, see [Appendix](#) table 10. Hence, clustered standard errors on parents birth country will be used, to account for the heteroskedasticity. For model 2 and 4 in table 4 where individual controls are added, the concern of multicollinearity arises, hence I inspect the variance inflation factor (VIF). The VIF values for regression 2 are presented in table 3 where the highest value obtained is 7.67 of the variable Jewish. This is a relatively high value compared to the rest, however a reason for this might be that the variable are constructed from a category variable, hence I will ignore it (Allison 2012). The values for Age and Age squared are high which is expected since they explain the same thing. The VIF values for regression 4 are presented in [Appendix](#), table 11 to save space.

4.1 First results

The results obtained from regression 1 and 3 in table 4 presents the estimations of the regressions with the most exogenous controls, age, age square and gender as well country-by-year fixed effects. The first regression in table 4 displays a positive effect for the mother's ancestral country, with a coefficient of 0.006 significant at a level

Table 3: VIF values for regression 2

Variable	VIF	1/VIF
Polity2, <i>mother</i>	1.50	0.666198
Male	1.03	0.966611
Age	28.85	0.034662
Age squared	29	0.034477
Unemployment	1.06	0.939277
Upper secondary	1.77	0.563571
Tertiary	1.7	0.588825
Low income	1.58	0.632558
Medium income	1.45	0.687907
Catholic	1.45	0.689425
Protestant	1.22	0.821014
Orthodox	1.88	0.531358
Islam	1.47	0.681225
Jewish	7.64	0.130835
Mean	5.84	

of 1 %. An increase in one standard deviation in the scale of Polity2 of mother's ancestral country implies an increase in individual's attitude against homosexuals of 0.006. This implies that second generation immigrants tend to have a more positive attitude towards homosexuals if their mother was born in a country with a higher level of democracy, compared with other individuals living in the same country with non-immigrant parents. The coefficient for regression 3, level of democracy for father's ancestral country, is slightly higher compared to the effect of mothers. The coefficient are 0.0064 and significant at a level of 1 %. This infer similar effect as for regression 1, that if an individual have a father born in a country with higher the level of democracy, the individual is more likely to have a higher acceptance himself, compared to individuals born in the same country.

The variable age is positive and significant at a level of 1 %, which implies that age have an positive effect on the attitude. However, age squared are negative and strongly significant, which infers that the positive effect that age have on the attitude towards homosexuals are lessened. The difference in the coefficients for age between regression 1 and 3, are around 0,0021, which is a small difference, hence a similar effect. If the respondent are male then they have a more negative attitude against homosexuals compared to women. However, the effect is not large but strongly

significant and have a similar effect between the two regressions, 1 and 3. This effect are in line with the results obtained by Moskowitz, Rieger and Roloff (2010) that men have a more negative attitude towards homosexuals. The coefficient takes the value negative 0.0504 for the regression on mother's ancestral country and -0.051 for the regression father's birth country, both being significant at a level of 1 %.

In regression 2 and 4 a set of individual controls have been added together with country-by-year fixed effects. When comparing the previous coefficients for parents ancestral country's level of democracy with the ones obtained with the added controls, there is a decrease. The coefficient with mothers birth country are around 0.00416, which is an decrease by 0.0017. However, the effect is still significant at a level of 1 %, which still implies that individuals who have a mother born in a country with higher democracy have a higher acceptance towards homosexuals them self, compared to other individuals born in the same country. Regarding the effect for the fathers birth country's government system, it have decreased by 0.00139 which is a smaller decrease than the regression with mothers birth country. The coefficient of Polity2, father are significant at a level of 1 %. The effects for age are still significant at level of 1 % with an abating effect as the age increases, for both regressions. However, the effect have decreased, when adding individuals controls, by 0.0026 for both regressions. The coefficient for male are still negative but the effect have become stronger with an significant effect at a level of 1 %, for both regression 2 and 4. Being unemployed have no significant effect on the attitude towards homosexuals for both regression 2 and 4. A reason for this might be that it only represents the short term unemployment, e.g. last 7 days, hence it would be to short term to actually have an impact on the individual's attitude.

For regression 2, the coefficients for upper secondary school are positive but not significant, which infer that there are no significant difference in attitude against homosexuals, between low educated and individuals that have upper secondary school as their highest education. Similar estimate are obtained for regression 4 implying the same result. When looking at the coefficient for tertiary education it is strongly significant and have an positive estimate. Which implies that individuals with an university degree have a more positive attitude towards homosexuals, compared with low educated individuals. The positive effect are stronger for regression 2 compared with 4, by approximately 0.02. Which implies that the effect of having a university degree have a greater effect on the attitude against homosexuals when taking mother's ancestral country in to account, than if fathers birth country were accounted. The results obtained indicates that having a low income have a negative effect on the attitude towards homosexuals, when taking mother's ancestral country

Table 4: First regressions

VARIABLES	(1) Immigrant mother	(2) Immigrant mother	(3) Immigrant father	(4) Immigrant father
Polity2 <i>mother</i>	0.00596*** (0.00187)	0.00416*** (0.00121)		
Polity2 <i>father</i>			0.00640*** (0.00118)	0.00501*** (0.00122)
Age	0.00861*** (0.00194)	0.00605*** (0.00176)	0.00651*** (0.00177)	0.00398** (0.00187)
Age squared	-0.000112*** (1.89e-05)	-8.84e-05*** (1.75e-05)	-8.75e-05*** (1.80e-05)	-6.63e-05*** (1.94e-05)
Male	-0.0504*** (0.0114)	-0.0598*** (0.0112)	-0.0510*** (0.00716)	-0.0654*** (0.00871)
Unemployment		0.0360 (0.0232)		0.0221 (0.0201)
Upper secondary		0.0255 (0.0169)		0.0187 (0.0161)
Tertiary		0.0851*** (0.0240)		0.0636*** (0.0214)
Low income		-0.0309** (0.0149)		-0.0173 (0.0150)
Medium Income		-0.0147 (0.0124)		-0.000823 (0.00944)
Catholic		-0.0501*** (0.0153)		-0.0703*** (0.0114)
Protestant		-0.109*** (0.0257)		-0.0925*** (0.0169)
Orthodox		-0.0143 (0.0336)		-0.0860*** (0.0286)
Islam		-0.199*** (0.0272)		-0.207*** (0.0243)
Jewish		0.0330 (0.0332)		-0.0289 (0.0290)
Observations	11,212	8,343	11,887	8,773
R-squared	0.220	0.304	0.228	0.302
Country-by-year FE	Yes	Yes	Yes	Yes

Notes: All estimations include a constant. Standard errors in parenthesis, allowing for clustering on ancestral country. *** p<0.01, ** p<0.05, * p<0.1

to account. However, for regression 4 income level have no significant effect on the individuals attitude. This is somewhat surprising since studies, such as Herek (2002) found that income level have a significant effect on attitudes against homosexuals. A reason of the different result might be that Herek (2002) used data from USA and the data used for this paper are from European surveys. Hence, I cannot distinguish if there exists a positive or a negative effect of different income levels when taking father's birth country into account.

When looking at the coefficients for religion it can be seen that all of them have an negative effect on the attitude against homosexuals, yet not all being significant. Catholic, Protestant and Islam all have a significant coefficient at a level of 1 %, implying that an individual who belongs to one of these religions have a more negative attitude against homosexuals. Belonging to Judaism have no significant effect on the individuals attitude, while Orthodox beliefs have a strong significant effect when accounting for the father's birth country, but not for the mother's ancestral country. A thing that can entangle the variables is the level of secularisation, which can play a big role since people can belong to a religion but differ in the religious profoundness. An idea could be to add the level of secularisation in the country.

4.2 Parental characteristics

In the table 5 presents regression with added controls for parental characteristics. As mentioned before a concern is that parent who from countries with high acceptance towards homosexuals have different characteristics. Hence, I add parents level of education and if the parent worked when respondent was 14 years old to check if the results are robust. I will mainly focus on the father's characteristics to conserve space. However, regressions on mother characteristics are made and display that a mother with a university degree have a significant positive effect, while upper secondary school and working father at age 14 does not.

In table 5 regression on individual attitude against homosexuals with added parental characteristics are done. In regression 5 the fathers birth country's level of democracy is still strongly significant and robust, with an estimate of 0.057 which is similar to the previous obtained in table 4. If an individual have a father with a university degree as highest completed education it have a positive effect on the individuals own attitude against homosexuals. The coefficient takes the value 0.0563 and are significant at a level of 1 %. On the other hand having a father with upper secondary school as highest education have no significant effect on the individuals attitude, compared if the father had low educational level instead. Throughout regressions 6 to 8 the estimate for fathers ancestral country's level of democracy

Table 5: Regression on parental characteristics

VARIABLES	(5) Immigrant father	(6) Immigrant father	(7) Immigrant father	(8) Immigrant father
Polity2 <i>father</i>	0.00570*** (0.00142)	0.00572*** (0.00152)	0.00599*** (0.00154)	0.00610*** (0.00151)
Tertiary <i>father</i>	0.0563*** (0.0179)	0.0570*** (0.0112)	0.0345 (0.0223)	0.0374 (0.0230)
Upper secondary <i>father</i>	0.00671 (0.0132)	0.00585 (0.00915)	-0.000264 (0.00994)	-0.000376 (0.0101)
Father worked at age 14		0.0196 (0.0130)	0.0139 (0.0126)	0.0129 (0.0122)
Tertiary <i>mother</i>			0.0475 (0.0322)	0.0365 (0.0322)
Upper secondary <i>mother</i>			0.00594 (0.0124)	-0.000398 (0.0124)
Mother worked at age 14				0.0339*** (0.00787)
Observations	7,701	7,561	7,392	7,354
R-squared	0.305	0.300	0.299	0.303
Country-by-year FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Notes: All estimations include a constant and individual controls includes gender, age, unemployment, education and religious beliefs. Standard errors in parenthesis, allowing for clustering on ancestral country. *** p<0.01, ** p<0.05, * p<0.1

are strongly significant and robust. The greatest difference are 0.0004, which is considered to be very small.

The estimates for father tertiary education becomes insignificant when mothers education are added, indicating that parents education have no effect on the individuals attitude against homosexuals, when they are considered at the same time. Having a father that worked when oneself are 14 years old have a positive insignificant effect on the individual's attitude against homosexuals. However, the variable for working mother at age 14 have a positive strong significant effect, inferring that having a mother who worked at age 14 have a more considerable than a father who worked. A reason for this can be that when considering old fashion roles of a family, e.g. father works, mother takes care of children and the home, it would then have greater magnitude of the mothers beliefs, since they would then spend more time with the individual and have the possibility to affect them.

4.3 Ancestral country characteristics

As mention in previous section [Data descriptives](#) a threat to the estimate of parents birth country's level of democracy, is that other parental birth country characteristics are correlated to the individuals attitude. Hence female labour force participation and the natural logarithm of the gross domestic product on parents ancestral country. All regression have a set of individual controls and country-by-year fixed effects.

Regression 9 in table 6 presents a regression with the added control for female labour force participation. The estimate for mothers birth country's level of democracy are strongly significant and compared to previous estimates, see table 4 and 5, it is a similar coefficient. Similar pattern are obtained for regression 11 where the coefficient are as well similar to the previous obtained coefficients in table 4 and 5. The estimate for LFP are not significant neither when considering the father or mothers ancestral birth country, which implies that the level of female labour force participation does not affect the individuals attitude against homosexuals and the estimate of level of democracy in parents birth country. When $\log(\text{GDP})$ are added the estimate for parents ancestral country's level of democracy increases a bit, while still being significant at a level of 1 %. The estimate of LFP are still insignificant for both regression 10 and 12, as well goes for the estimate of $\log(\text{GDP})$. This indicates that the $\log(\text{GDP})$ in the parents birth country have no transmission to the individual on its attitude against homosexuals, a reason for this is might be that counties that are relatively rich can still be very homophobic, for example Russia.

When adding other country characteristics it does not change the estimate of

Table 6: Regression on ancestral characteristics

VARIABLES	(9) Immigrant mother	(10) Immigrant mother	(11) Immigrant father	(12) Immigrant father
Polity2 <i>mother</i>	0.00420*** (0.00126)	0.00501*** (0.00141)		
Polity2 <i>father</i>			0.00494*** (0.00125)	0.00527*** (0.00130)
LFP <i>mother</i>	-7.92e-05 (0.000695)	0.000196 (0.000755)		
log(GDP), <i>mother</i>		-0.00723 (0.00747)		
LFP <i>father</i>			0.000119 (0.000450)	0.000218 (0.000489)
log(GDP), <i>father</i>				-0.00477 (0.00471)
Observations	8,333	8,225	8,759	8,651
R-squared	0.304	0.305	0.302	0.304
Country-by-year FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Notes: All estimations include a constant and individual controls includes gender, age, unemployment, education and religious beliefs. Standard errors in parenthesis, allowing for clustering on ancestral country. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

government system in parent's birth country, which indicates that it is a robust estimate.

4.4 Mother v.s. Father

The results obtained in section [First results](#), have indicated that fathers have a larger effect on the individuals attitude against homosexuals than what mothers have. In table 7 I have regressed on individuals with a native parent to see how the effect differs. Regression 13 includes individuals with a immigrant mother and a native father, whereas the coefficient are not significant and takes the p-value 0.93. This implies that immigrant mothers have no effect on the individual's attitude against homosexuals when the father is native. In regression 14 the individuals who have an immigrant mother and a native father or a immigrant father who are not born in the same country as the mother, are added. The coefficient that are obtained indicates that there are no effect for mothers here, as well. The coefficient are very small and takes the p-value of 0.95. Next, individuals who have an immigrant father and a native mother are regressed. The result obtained indicates that the level of democracy in father's birth country have a strong significant effect on the individuals attitude against homosexuals, when the mother are native. In regression 16 the individuals' who have an immigrant father and an immigrant mother from a different country than the father, are added. The obtained coefficient are significant at a level of 10 % and are similar to the one obtained in regression 15, which indicates a robust estimate.

When looking at the results obtained, it shows that mothers have no significant effect on the individuals attitude, however, the results in table 4 and 6 indicates that they do. It is somewhat confounding. Therefore, I regressed on individuals who have immigrant parents from the same country and the results for are strongly significant. When comparing the effects between regressions , 13, 14 and 17 it can be seen that the mother does not have an effect on the individuals attitude against homosexuals and it is mainly driven by the father. The effect obtained in previous tables 4 and 6, where level of democracy in mother's birth country are only driven by the one where both parents are from the same country, e.g. the effect of the father is the one who takes over.

As presented in graph 2, section [Data descriptives](#), there are no difference in distribution of Polity2 between mothers' and fathers'. Hence, it can be concluded that the result obtained in table 7 are not confound by such difference in data.

Table 7: Comparison between mother father

VARIABLES	(13) Immigrant mother, native father	(14) Immigrant mother, native/other immigrant father	(15) Immigrant father, native mother	(16) Immigrant father, native/other native/other mother	(17) Immigrant mother & father same country
Polity2 <i>mother</i>	-0.000186 (0.00218)	9.99e-05 (0.00191)			0.00948*** (0.00203)
Polity2 <i>father</i>			0.00272** (0.00123)	0.00267* (0.00137)	
Observations	3,959	4,915	4,423	5,345	3,428
R-squared	0.352	0.344	0.355	0.343	0.275
Country-by-year fixed effects	Yes	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes	Yes

Notes: All estimations include a constant and individual controls includes gender, age, unemployment, education and religious beliefs. Standard errors in parenthesis, allowing for clustering on ancestral country. *** p<0.01, ** p<0.05, * p<0.1

4.5 Cut off

In table 8, regression 18 presents the effect for individuals where the level of democracy in father's birth country is higher or equal than in the mother's birth country, including both native and immigrant mothers. This will be compared with regression 19, where the level of democracy in father's ancestral country is lower than the mother. The coefficient for regression 18 takes the value 0.009 and are strongly significant, while the coefficient for regression 19 are 0.0038 and significant at a level of 5 %. This implies that a father who are born in a country where the level of democracy is lower than in the mother's birth country, have a greater effect on the individuals attitude against homosexuals.

Table 8: comparison between high vs low

VARIABLES	(18)	(19)
	Immigrant father	Immigrant father
Polity2 <i>father</i> if father \geq mother	0.00924*** (0.00161)	
Polity2 <i>father</i> if father < mother		0.00379** (0.00152)
Observations	5,776	2,997
R-squared	0.263	0.390
Country-by-year FE	Yes	Yes
Individual controls	Yes	Yes

Notes: All estimations include a constant and individual controls includes gender, age, unemployment, education and religious beliefs. Standard errors in parenthesis, allowing for clustering on ancestral country. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

4.6 Male v.s Female

As presented in table 4 males have a more negative attitude against homosexuals compared with females. In table 9 regressions are made and grouped by male and female respondents'. In regression 22 and 23 there can be seen a difference in the effect between males and females, whereas the effect for males are around 1,8 times greater than for females. The coefficients for male respondent are significant at a level of 1 %, while females are significant at a level of 5 %. This implies that the

fathers transmissions have a greater effect on male children, than what it have on female children. A reason for this might be that male children tries to mimic their father in how they act and as well for their beliefs (Pruett 1997). Another reason can be that male individuals' are more homophobic in general than what females' are (Moskowitz, Rieger and Roloff, 2010).

Table 9: Comparison between gender

VARIABLES	(22)	(23)	(24)	(25)
	Respondent male	Respondent female	Respondent male, immigrant father, native/other mother	Respondent female immigrant father, native/other mother
Polity2 <i>father</i>	0.00643*** (0.00150)	0.00364** (0.00166)	0.00380** (0.00167)	0.00129 (0.00198)
Observations	4,030	4,743	2,399	2,946
R-squared	0.267	0.344	0.279	0.416
Country-by-year FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Notes: All estimations include a constant and individual controls includes age, unemployment, education and religious beliefs. Standard errors in parenthesis, allowing for clustering on ancestral country. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In regressions 24 and 25 in table 9, presents results of male and female respondents which father is immigrant and their mother is native or an immigrant from a different country. It can be seen that the effect from male respondent have lessened by 0.0026 which is a decrease by 40 %. For females the effect have decreased to 0.0013 which corresponds to a decrease around 66 %. The coefficient for male are still strongly significant while it becomes insignificant for females. This all implies that the effect is weaker when the father is an immigrant and the mother is native or immigrate from a different country compared to the father. This means that the effect of transmission is greater when both parent migrate form the same country. Hence, the child is exposed to a more homogeneous effect, compared with children whereas the parents migrate from different countries. For a female who have an immigrant father and a native mother or other migrated from a different country, there are no significant effect of transmission of the father. The effect is only significant when both parents are born in the same country. It would be reasonable to assume that the child is only exposed to one culture and that it would be easier for that

culture to be transmitted. This all compared with children whose parent are born in different countries, hence exposed to at least two cultures.

5 Conclusion

This paper finds that there exists a significant transmission of homophobia from the father to the child. The effect for mothers to child are not significant, hence it is concluded that the effect is mainly driven by the father. It is also shown that individuals who have immigrant parents that are from the same country, have a stronger transmission of homophobia. Men are around 1,8 times more affected by the fathers attitude against homosexuals than women, which coincide with the proof that males are more homophobic than females. If the individual had a mother working s/he is more likely to be less homophobic than an individual who had an unemployed mother. This paper have shed a light of how homophobia is created and it comes from.

Previous studies that have tried to determine the intergenerational transmission of homophobia are been divided about the actual effect. Previous studies have used an approach that allows reverse causality to be present, such as O'Bryan, Fishbein & Ritchey (2014). In this paper the epidemiological approach was used. It have never been applied to the case of homophobia before and shed a new light on the matter. By using the level of democracy in the parents birth county the risk of reversed causality is mitigated.

The effects that homophobia have on the society is something that have not been determine in this paper, the main focus was to explore the effects a parents attitude against homosexuals on the child own attitude. That homophobia is cost for society is something previous studies have proven, however the amount of studies are frugal and is something that needs to be more researched by economists.

6 References

- About F E, Doyle A B (1996). Does talk of race foster prejudice or tolerance in children? *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement* Volume 20. Issue 3.
- Acock, A. C., & Bengtson, V. L. (1980). Socialization and attribution processes: Actual versus perceived similarity among parents and youth. *Journal of Marriage and the Family*. Volume 42. Issue 3.v
- Adamczyk A (2017). Cross-National Public Opinion about Homosexuality. ISBN: 9780520288768
- Alesina A, Giuliano P (2010). The power of family. *Journal of Economic Growth*. Volume 15. Issue 2.
- Alesina A, Giuliano P (2011). Family ties and political participation. *Journal of the European Economic Association*. Volume 9. Issue 5.
- Balkin R S, Schlosser L Z, Levitt D H (2009). Religious Identity and Cultural Diversity: Exploring the Relationships between Religious Identity, Sexism, Homophobia, and Multicultural Competence. *Journal of Counseling & Development*. Volume 87. Issue 4.
- Barnes D M, Meyer I H (2012). Religious Affiliation, Internalized Homophobia, and Mental Health in Lesbians, Gay Men, and Bisexuals. *The American Journal of Orthopsychiatry*. Volume 82. Issue 4.
- Chakrapani V, Newman PA, Shunmugam M, McLuckie A, Melwin F (2007). Structural violence against Kothi-identified men who have sex with men in Chennai, India: a qualitative investigation. *AIDS Educ Prev*. Volume 19. Issue 4.
- Chen C P, Keats A (2016). Career development and counselling needs of LGBTQ high school students. *British Journal of Guidance & Counselling*. Volume 44. Issue 5.
- Colgan, Creegan, McKearney, Wright (2007). Equality and diversity policies and practices at work: lesbian, gay and bisexual workers. *Equal Opportunities International*. Volume 26. Issue 6.
- Curtis W. B, Newcombe N (1986). Racial Attitude Development among Young Black Children as a Function of Parental Attitudes: A Longitudinal and Cross-Sectional Study. *Child Development*. Volume 57. Issue 3.
- Dalhouse M, Frideres J (1996). Intergenerational Congruency: The Role of the Family in Political Attitudes of Youth. *Journal of Family Issues*. Volume 17. Issue 2.

- Degner J, Dalege, J (2013). The apple does not fall far from the tree, or does it? A meta-analysis of parent-child similarity in intergroup attitudes. *Psychological Bulletin*. Volume 139. Issue 6.
- Dhont, K., Roets, A., Van Hiel, A. (2013). The intergenerational transmission of need for closure underlies the transmission of authoritarianism and anti-immigrant prejudice. *Personality and Individual Differences* Volume 54. Issue 6.
- Duriez B, Soenens B (2009). The intergenerational transmission of racism: The role of Right-Wing Authoritarianism and Social Dominance Orientation. *Journal of Research in Personality*. Volume 43.
- Encarnación Omar G (2014). Gay Rights: Why Democracy Matters. *Journal of democracy*. Volume 25. Issue 3.
- Fernández R, Fogli A (2006). Fertility: the role of culture and family experience. *Journal of the European Economic Association*. Volume 4. Issue 2-3.
- Fernández R, Fogli A (2009). Culture: an empirical investigation of beliefs, work, and fertility. *American Economic Journal: Macroeconomics*. Volume 1. Issue 1.
- Fernández R (2010). Does culture matter? *NBER Working Paper No. 16277*
- Gusio L, Sapienza P, Zingales L (2006). Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives*. Volume 20. Issue 2.
- Herek, G.M. (2002). Heterosexuals' attitudes toward bisexual men and women in the United States. *Journal of Sex Research* Volume 39. Issue 4.
- International Standard Classification of Education (ISCED) (2018). url: [http://ec.europa.eu/eurostat/statistics-explained/index.php/International_standard_classification_of_education_\(ISCED\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/International_standard_classification_of_education_(ISCED)) (visited on 05/04/2018)
- Jennings M K, Niemi R G (1981). Generations and Politics A Panel Study of Young Adults and Their Parents. *Princeton Legacy Library*.
- Johnson ME, Brems C, Alford-Keating P (1997). Personality correlates of homophobia. *Journal of homosexuality*. Volume 34. Issue 1.
- Lethtonen, J. (2002). Non-Heterosexual Young People at Work in the Military Service. In J. Lethtonen (Ed.), *Sexual and Gender Minorities at Work*. Helsingfors: Ministry of Labour.
- Lethtonen, J. (2004). Straight People Don't Tell, Do They?, Negotiating the Boundaries of Sexuality and Gender. *ESF research reports 2b/04*. Helsingfors: Ministry of Labour.
- Lethtonen, J. (2010). Gendered Post-Compulsory Educational Choices of Non-Heterosexual Youth. *European Educational Research Journal*. Volume 9. Issue 2.

- Lehtonen J. (2016) Experiences of Non-Heterosexual and Trans Youth on Career Choice and in the Workplace. In: Köllen T. (eds) *Sexual Orientation and Transgender Issues in Organizations*. Springer, Cham
- Ljunge M (2014). Trust issues: Evidence on the intergenerational trust transmission among children of immigrants. *Journal of Economic Behavior & Organization*. Volume 106.
- Luttmer E, Singhal M (2011). Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy*. Volume 3. Issue 1.
- Marshall (2017). Polity IV Project. Dataset Users' Manual url: <https://www.systemicpeace.org/inscr> (visited on 02/04/2018).
- Meeusen, C (2014). The parent–child similarity in cross-group friendship and anti-immigrant prejudice: A study among 15-year old adolescents and both their parents in Belgium. *Journal of Research in Personality* Volume 50. Issue 1.
- Meeusen, C, Dhont, K (2015). Parent–Child Similarity in Common and Specific Components of Prejudice: The Role of Ideological Attitudes and Political Discussion. *European Journal of Personality* Volume 29.
- Miller R B, Glass J (1989). Parent-child attitude similarity across the life course. *Journal of marriage and the Family*. Volume 59.
- Moskowitz DA, Rieger G, Roloff ME (2010). Heterosexual attitudes toward same-sex marriage. *Journal of homosexuality*. Volume 57. Issue 2.
- O'Bryan, Fishbein, Ritchey (2004). Intergenerational transmission of prejudice, sex role stereotyping, and intolerance. *Adolescence*, Volume 39.
- Pruett K D. M.D. (1997). *How Men and Children Affect Each Other's Development*. Yale Child Study Center, New Haven, Connecticut. Volume 18. Issue 1.
- Reddy G, Nanda S (2009). Hijras: An "Alternative" Sex/Gender in India. In C. B. Brettell, & C. F. Sargent, *Gender in Cross-Cultural Perspective* (pp. 275-282). Upper Saddle River, New Jersey: Pearson - Prentice Hall.
- Rodríguez-García, J.-M, Wagner, U. (2009). Learning to be prejudiced: A test of unidirectional and bidirectional models of parent–offspring socialization. *International Journal of Intercultural Relations*. Volume 33. Issue 6.
- Schneider MS, Dimito A (2010). Factors influencing the career and academic choices of lesbian, gay, bisexual, and transgender people. *J Homosex*. Volume 57. Issue 10.
- Stotzer, R (2009). Violence Against Transgender People: A Review of United States Data. *Aggression and Violent Behavior*. Volume 14.

- Towles-Schwen T, Fazio R H (2001). On the Origins of Racial Attitudes: Correlates of Childhood Experiences. *Personality and Social Psychology Bulletin*. Volume 27. Issue 2.
- Willis P (2012). Witness on the Periphery: Young Lesbian, Gay, Bisexual and Queer Employees Witnessing Homophobic Exchanges in Australian Workplaces. *Human Relations*. Volume 65. Issue 12.
- Willis P (2014). Working Across Differences in Sexuality and Age: Australian Stories of Young LGBTQ Workers' Experiences in Paid Employment. *Sexual Orientation at Work: Contemporary Issues and Perspectives*.
- Worthen M G. F (2012). Heterosexual College Student Sexual Experiences, Feminist Identity, and Attitudes Toward LGBT Individuals. *Journal of LGBT Youth*. Volume 9. Issue 2.

7 Appendix

Table 10: White's test

Source	chi2	df	p
Heteroskedasticity	982.06	347	0.0000
Skewness	1754.29	45	0.0000
Kurtosis	103.20	1	0.0000
Total	2839.56	393	0.0000

Table 11: VIF values for regression 4

Variable	VIF	1/VIF
Polity2, <i>father</i>	1.44	0.693120
Male	1.03	0.966441
Age	29.23	0.034207
Age squared	29.21	0.034237
Unemployment	1.06	0.945051
Upper secondary	1.69	0.592375
Tertiary	1.66	0.601058
Low income	1.63	0.614671
Medium income	1.51	0.660197
Catholic	1.46	0.684298
Protestant	1.23	0.809960
Orthodox	1.86	0.537838
Islam	1.5	0.668473
Jewish	7.8	0.128215
Median	5.881428571	