Master in Institutions and Political Economy Master Thesis

Master Thesis title:

Pride and Policy: A Survey Experiment to Understand the Influence of Homosexuality on Policy Support

Student:

Andreas Halbig

Advisor:

Aina Gallego Dobón

Academic year: 2023-2024



Master en Institucions i Economia Política

Pride and Policy:

A Survey Experiment to Understand the Influence of Homosexuality on Policy Support

Andreas Halbig 21262743 University of Barcelona Master of Science in Institutions and Political Economy

Advisor: Aina Gallego Dobón

June 24, 2024

Abstract

How does the sexual orientation of a politician influence support for their policies? Literature suggests that overall, there is likely to be no effect, while among older, conservative, male individuals support for a policy proposed by a homosexual politician is smaller. Two main theories explain this phenomenon. First, reduced support among this subgroup could be due to the spillover of an individual's attitudes towards homosexuals on the evaluation of the policy, called attitudinal spillover. Second, scholars emphasize the importance of emotions in the policy process that could be triggered by homosexual politicians. Neither has been tested for homosexual politicians which is due to the relatively recent interest in the study of homosexuality in politics and the scarcity of observational data. To close this gap in the literature, I conducted a vignette experiment embedded in an online survey that manipulates the sexual orientation of politicians in different policy fields. Results hint towards a positive bias in the evaluation of the homosexual politician's policy compared to his heterosexual counterpart although this does not prove to be statistically significant. This study contributes to the understanding of biases in the policy evaluation process and bears important insights in understanding inequalities in political representation.

Keywords

policy support, homosexuality in politics, survey experiment, attitudinal spillover, emotions, source cues

Introduction

What do Angela Merkel, Barack Obama, and Gabriel Attal have in common? They all are a first in their respective countries: the "first woman chancellor" (Harding, 2005), the "first black president" (MacAskill et al., 2008), and the "first openly gay prime minister" (Cohen, 2024). These characteristics, regardless of the importance that the respective politician attaches to them, are likely to shape the perception of the population as soon as they become the subject of public discourse. This idea also sparked the interest among scholars who have become keen to uncover how the individual characteristics of a politician influence their (re-)election chances, their acceptance among citizens, and their support for their policies. This demandside approaches analyzed, for example, the effects of race (Weaver, 2012; Tesler, 2012), ethnicity (Burgess et al., 2015; Franck & Rainer, 2012), religion (Grzymala-Busse, 2012) or gender (Chattopadhyay & Duflo, 2004; Schwarz and Coppock, 2022) on elections choices and policies. Other characteristics such as sexual orientation remain understudied. Hence, this paper contributes to the understanding of homosexual politicians in the political arena.

The twenty-first century has undoubtedly brought about a major liberalization in rights for, lesbians, gays, and bisexuals (LGB) in Europe: Same-sex marriage was legalized in nineteen, and adoption rights for same-sex couples were introduced in fourteen European countries (Pew Research Center, 2023). These legal changes have also instigated research with regard to homosexuality in political science and economics. Indeed, as Abou-Chadi and Finnigan (2019) show using the example of same-sex marriage rights, legislative change leads to a positive attitudinal shift toward homosexuals in society beyond the targeted group.

Yet, this progress toward equality cannot hide the fact that prejudice and stereotypes continuously lead to discrimination against the LGB population. Resulting inequalities exist in all spheres of the lives of the LGB population. For instance, there is evidence of disparities in health outcomes for homosexual individuals – both mental and physical (Malik et al., 2023; Thoma et al., 2021). Further, besides the outright criminalization of same-sex relations, even though marriage and adoption rights exist for same-sex couples, discriminatory behavior continues to play a role. Mackenzie-Liu et al. (2021) show that the quality of responses from adoption agencies is relatively worse for male same-sex couples compared to their female and heterosexual counterparts.

Moreover, discrimination is not limited to the private lives of LGB individuals but is also present in the professional realm. Drydakis (2015) found that the indication of engagement in a queer students' union on the Curriculum Vitae decreased the individual response rate for a job interview by five percent. Similarly, in another paper, he found wage gaps for bisexual men and gay men compared to their heterosexual counterparts as well as for bisexual women. Yet, homosexual women earned more than heterosexuals (Drydakis, 2022).

With regards to politics, Turnbull-Dugarte (2024) advances that LGB and transgender (LGBT) individuals, especially from conservative families, are more likely to deviate from the political preferences of their parents compared to their peers. This finding underlines the *sex-uality gap* in politics which refers to the fact that LGBT individuals systematically turn out more (Grahn, 2023) and vote for rather liberal parties – which are also more supportive of minority rights – than their heterosexual counterparts (Turnbull-Dugarte, 2020).

Sexuality is salient in campaigning as well. Turnbull-Dugarte and López Ortega (2023) show how radical right-wing parties use homosexuality as a pretext to incite hatred against immigrants with a mostly Muslim background which they term "Homonationalism" (Turnbull-Dugarte & López Ortega, 2023). Further, there is evidence that there is discrimination against LGBT candidates in elections. Magni and Reynolds (2021) uncovered voter bias against these candidates in an experiment conducted in the United States, the United Kingdom, and New Zealand. LGBT candidates are the strongest penalized in the US. This leads to the overall underrepresentation of LGBT candidates in parliaments, even though improvements have been made over the last few years.

Being successfully elected is only one hurdle in an individual's political career. Politicians must lobby for their projects, not only within their own ranks but also across party lines and among the population. Whether they receive support affects their chances of re-election. As sexual orientation is salient in campaigning it likely remains salient beyond campaigning in elections and finally the everyday work of politicians. Therefore, it is of vital importance to investigate whether the personal characteristics of a politician influence the support of the voting population. This paper investigates this question and aims to enhance our understanding of how the sexual orientation of politicians influences the support they receive for their policies.

Empirically, I answer this question with a survey experiment among German citizens. Participants were randomly exposed to a vignette that showed a hypothetical social media post. The treatment group received this post with the pride flag next to the name of the politician which should function as a source cue for the sexual orientation of the politician. Participants were then asked for their support for the proposed policy. Results show that there is overall no significant difference in support for the policy of a heterosexual compared to a homosexual politician even though the tendency hints towards a higher average support for the homosexual politician.

In doing so, I contribute to the growing literature on LGBT issues in political science (Badgett et al., 2021). The study of minorities or discriminated groups has received broad attention also beyond academia and led to a development in real-life politics that is often called identity politics. Identity politics refers to the political practice of advocating for minority rights and equality and fighting marginalization and discrimination. This practice is used both by the political right and left further contributing to the ongoing polarization. My paper applies an academic lens to identities defined by sexual orientation in the political arena thereby contributing to the

understanding of how said identities influence the perception of policymakers and the evaluation of policies.

Moreover, with this study, I am testing on the one hand the attitudinal spillover theory that posits the possibility of the infusion of debate about a policy along the lines drawn by the politician's personal characteristics. On the other hand, I am highlighting the role of emotions in the policy process. Both serve to better understand how policies come about and ultimately what makes them successful e.g., being supported by the citizens and passed by the parliament, and what does not.

The remainder of this paper is organized as follows: in the next section, I will present the state-of-the-art literature on policy acceptance and personal characteristics in political science research. This will be followed by an overview of my experimental method, a description of the data, and model specification. Further, I will present and discuss my results before I conclude this paper with some limitations and suggestions for future research.

Policy support and sexual orientation

Policy support is a crucial issue in the functioning of democracies as it is a prerequisite for policy compliance, hence its overall effectiveness. This is true for almost all realms of politics and especially for those that dominate public discourse such as migration (e.g., Craig & Richeson, 2014), climate (e.g., Gaikwad et al., 2022), healthcare (e.g., Tesler, 2012), redistribution (e.g., Peyton, 2020), etc. Beyond that, it also influences re-election as voting can be seen as a sanctioning tool for incumbents (Besley & Case, 2003). This is because a politician who repeatedly opts to introduce policies that do not receive the support of the citizens might face his reelection chances dwindling.

Even though this reelection principle is rather stable over time, the landscape of democracies, particularly in Europe and Northern America, has changed in other ways over time. Namely, it has seen a diversification in the demographic makeup of policymakers. With the liberalization of political institutions, there has been a shift away from the historical dominance of white, heterosexual cis men in positions of power. This shift raised two strands of research within political science: first, why these personal characteristics are significant to the individual, and second, how they affect policymaking and policy support.

Personal characteristics or so-called source cues can be thought of as a cognitive shortcut (Mondak, 1993). Ideally, an individual would evaluate a person with all the necessary information and take her time. This is, however, quite impractical in the everyday life of people and, on top of that, consumes a significant amount of cognitive energy. To shorten this tedious process, source cues render the evaluation of policies less complex and thereby make the decision-making process more efficient. Likewise, in situations where information or time is

scarce, source cues allow individuals to make a choice nonetheless. This heuristic process comes at the cost of reduced accuracy of the decision (Mintz et al., 2022). For the individual, this inaccuracy might have little to no impact on their life. Yet, as Mondak (1993) shows, when these individual inaccuracies are aggregated to the masses the process of using source cues as heuristics for decision-making can have a consequential impact on public opinion and mass belief as the example of partisan cues shows. Hence, using a politician's sexual orientation as a source cue to decide whether to support a policy might lead to inefficient outcomes for society.

Partisan cues are probably one of the most salient source cues and have gained considerable attention within academia (Goren et al., 2009; Arceneaux, 2008). Not only do individuals use partisan cues for their decision-making but they can also influence their policy preferences (Brader et al., 2020) which makes them highly perceptible to manipulation. However, as Bracic et al. (2023) demonstrate identity cues such as gender, race, and sexuality are used heuristically to evaluate ideology and are not overridden by partisan cues. Therefore, investigating source cues like gender and race remains relevant even in the presence of partisan information.

Concerning gender, the seminal work of Chattopadhyay and Duflo (2004) revealed that women who enter local councils via quotas indeed affect policies. The public good provision is adjusted to the needs of women when compared to municipalities without quotas. This backs the insights from the citizen candidate model that the identity of the leader matters for policy outcomes. In a follow-up paper, Beaman et al. (2009) show that the effect of quotas lasts as women are more likely to be (re-)elected, they are perceived as effective leaders, and prejudices among men and women toward female politicians are reduced. Hence, these findings demonstrate how discriminatory attitudes hinder women from attaining office, while visibility can foster positive change and most likely an increase in policy support.

Similarly, attitudes – particularly racial attitudes – influence policy support, as seen with Barack Obama's health care initiative. Tesler (2012) finds that the formerly not racialized public opinion about healthcare became largely divided along a racial line separating African Americans and whites. This effect is attributed to Obama as a black person controlling, for instance, for party affiliation (Tesler, 2012). Tesler (2012) terms this 'racial spillover' which describes the phenomenon where racial attitudes permeate policy issues that do not inherently have a patent link to race. This spillover of attitudes might even have the power to override preexisting attitudes on a policy issue. The obvious objection is that – due to its history – this is a US-specific problem. Yet, Besco and Matthews (2023) prove the extrapolation of the attitudinal spillover theory to the Canadian context. Overall, this is another proof of how politicians' source cues such as gender and race shape support for policies among citizens and underlines the identity hypothesis of Chattopadhyay and Duflo (2004).

In this regard, sexual orientation has not yet received the scrutiny that gender and race have. This has guite a mundane reason: namely that the percentage of the population who identify as bisexual or homosexual is rather small compared to gender or race and non-heteronormative sexual behavior was criminalized until relatively recently. Decriminalization also promoted more positive attitudes towards LGB individuals. Abou-Chadi and Finnigan (2019), for instance, document a change in the attitudes toward homosexuals with the legalization of same-sex marriage. Besides having a positive impact on LGB individuals, it also caused attitudinal changes in society (Abou-Chadi & Finnigan, 2019). Additionally, the introduction of same-sex marriage is likely to have an economic impact as employment rates of LG individuals went up in the US (Sansone, 2019). And – even though still underrepresented – LGBT individuals come closer to a proportionate representation (Magni & Reynolds, 2021). These macrolevel changes do however not imply a similar change on the individual level. Once in office, it is unclear whether homosexuals receive a different evaluation of their work – policy support – than their heterosexual counterparts. It is quite likely that there is some kind of effect as sexuality is especially 'infused with politics' (Egan, 2020: 713). Using a source cue approach, Bracic et al. (2023) find that sexuality is more salient than gender or race when individuals determine a judge's ideological stance and how fair and impartial he or she is.

This rather political view of identity cues' positive impact of sexual orientation on policy support is also underpinned by the socio-psychological theory of social roles. According to this theory, a gay male politician is subject to three social roles: man, homosexual, and politician all of which come with different expectations by society. Gay men are usually perceived as closer to heterosexual women than heterosexual men which is the essence of implicit inversion theory (Kite & Deaux, 1987). In the next step, role congruity theory suggests that (political) leadership is loaded with male attributes such as assertiveness and competitiveness. Hence, men do not experience role incongruity and therefore no unfavorable fit or performance evaluation based on their gender according to Barrantes and Eaton (2018). In fact, they seem to be evaluated as overall more suitable for typically female leadership roles that require communion compared to their heterosexual counterparts. This supports earlier evidence that shows that prototypical women and counter-prototypical men are perceived to be a better fit for communal policy issues such as social policies (Lammers et al., 2009).

Therefore, in accordance with previous work, I do not anticipate overall different levels of support for the policy proposal of a heterosexual versus a homosexual politician.

H1. Participants' level of support does not vary with the sexual orientation of the politician.

However, voters are not one homogenous mass and, therefore, support might vary with the citizens' characteristics. Bracic et al. (2023) found that Democrats evaluate a marginalized judge as more liberal and trustworthy than Republicans. Additionally, both, Abou-Chadi and

Finnigan (2019) and Magni and Reynolds (2021) were able to define a quite specific group that is accepting of LGBT rights and LGBT politicians, that is female, highly educated, non-religious, liberal individuals with LGBT individuals in their social environment. Consequently, I expect support to be divided along those lines.

H2. Support is less likely to vary for young, female, highly educated, non-religious, liberal individuals with LGBT+ individuals in their social environment.

Hitherto, I have established that there will be overall no effect and a negative attitudinal spillover effect from the sexuality of the politician on his policy proposal for male, conservative, rather religious, and low-educated individuals. This latter effect can be explained by looking more closely at the process of policy evaluation. Policy evaluation can either be a rational, moral, or affective process (Rodriguez-Sanchez et al., 2018). Even though attitudes have a cognitive and an emotional component, it is likely that due to the limited availability of information in the experimental setting, affective responses will dominate and become the primary driver of the respondent's overall assessment of the policy.

The fact that emotions play an important role in politics is long established (Marcus, 2000). Aarøe et al. (2017) prove how disgust influences opinions on migration issues and Small and Lerner (2008) show how sadness and anger influence how people evaluate welfare policies. Racial attitudes have been scrutinized using an emotional lens by Banks and Valentino (2012) who document a shift from disgust to anger as the underlying driver of racism in the US. Looking at psychological research on emotions and homosexuality, Parrott and Peterson (2008) demonstrate how anger explains antigay aggression, and Ray and Parkhill (2021) find that disgust together with heteronormative attitudes explains antigay hostility. Both studies were only conducted among heterosexual men. This is in line with a large cross-sectional study of attitudes toward gay men and lesbian women that finds that men's attitudes towards heterosexuals are more pronounced than women's (van Leeuwen et al., 2023). Therefore, I expect that the negative emotions of anger and disgust drive my results, particularly for male participants.

H3. Anger and disgust especially among men are driving the support of the policy.

Furthermore, the content of the proposed policy might largely influence policy support. There is substantive evidence that women are perceived as less apt in policy areas such as defense or crime (Atkinson & Windett, 2019). As elaborated above, gay men are usually evaluated as more feminine than heterosexual men (Barrantes & Eaton, 2018). Hence, it is likely that similar restrictions in aptness toward certain policy areas might apply to homosexual politicians. This assumption is also underpinned by Besco and Matthews (2023) who indicate that spillover is smaller in policy areas that are naturally infused with salient personal characteristics. In their case, a policy that concerns racial issues is already racialized, therefore, the spillover is smaller. Likewise in the case of this paper, spillover is expected to be smaller for an LGB issue. Therefore, I test the attitudinal spillover using a policy that is close to the source cue – sexual orientation – of the homosexual politician and one that is unrelated.

H4. Differences in support between control and treatment vary less for the LGB policy.

Lastly, the negative stimulus that some will perceive the politician's sexual orientation as will most likely be reinforced by a legislative initiative that exudes danger (Fournier et al., 2020). If there exist differences in the evaluation of the policy depending on whether a heterosexual or homosexual politician proposes it, then negativity bias is an important phenomenon to consider in the communication and drafting of policies.

H5. Negative emotion-inducing policies proposed by homosexual politicians face weaker support than when proposed by heterosexual politicians.

Data and Research Design

Institutional Background and Experimental Design

I test these hypotheses in Germany which presents an ideal setting for my survey. First, it is a country that approved same-sex marriage and adoption rights for homosexuals only in 2017 and therefore quite late in the European comparison. Hence, the acclimatization to the new legal situation is more recent, and not all parts of society might have fully adapted to it in terms of attitudes. Second, crimes based on sexual orientation have been rising in recent years in Germany according to the German *Federal Ministry for Family Affairs, Senior Citizens, Women and Youth* (2023). For instance, in 2020, a gay couple was attacked in Dresden whereby one man of the couple was killed (Dpa, 2021). In 2022 during the Christopher Street Day celebrations in Münster, a trans man was killed after confronting a man who was insulting a group of women in a homophobic manner (Wulf, 2023). Third, at the same time, the German parliament as elected in 2021 is the most diverse even though not yet representative of the population comparison. Lastly, testing the attitudinal spillover theory in an experimental setting for a new characteristic – sexual orientation – in a truly multiparty system offers new insights into the functioning and generalizability of said theory.

To test my hypotheses, I designed an innovative vignette experiment which was conducted as an online survey. The experiment is set up in such a way that the causal effect of sexual orientation on support for the policy can be isolated. Specifically, sexual orientation is manipulated by the presence or absence of the pride flag next to the politician's name in a hypothetical social media post. The pride flag is a common sign for the LGBT+ community and is known beyond this community in the general public which the later analysis of the data also proved: a total of 86.94% of respondents correctly identified the meaning of the pride flag among various options. Hence, the pride flag serves as my source cue in this setting. This setup allows me to hold other factors constant that might bias the results in other settings. Also, it leaves no doubt about the direction of the effect – it rules out that the policy influences the perception of the politician.

The experiment involved assigning respondents to read a brief hypothetical social media post. This setting is very close to reality as the importance and effects of the Internet and especially social media on political outcomes received broad acknowledgment within academia (Zhuravskaya et al., 2020). Social media is seen as a driving force of polarization and is known to have influenced elections in the US (Fujiwara et al., 2023).

Participants were informed ex-ante that the situation was purely hypothetical which ultimately leads to a better quality of the experiment as it eliminates the concern of pretreatment exposure. The vignette consisted of either a fictitious heterosexual or homosexual politician, expressing his support for (a) including a ban on discrimination based on sexual orientation in the German basic law, (b) an AI law protecting workers from negative labor market impacts caused by AI, or (c) an AI law to bolster German economy. The content of the policies was chosen according to the insights from the literature: a policy close to the personal characteristic, an unrelated policy that is not yet divided by attitudes about sexual orientation, and a negatively framed policy to test negativity bias. The LGB policy is an adaptation of a proposal by the current government (SPD, the Greens, and FDP) in a paper called *Queer Action Plan* (Bundesregierung, 2022). However, as this is not mentioned anywhere in the survey and media coverage was rather low on this document, it is unlikely that the policy will be connected to this government document.

The unrelated policy concerns AI which is a topic emerging as one of the main factors of political and economic change in the current decade (Gallego & Kurer 2022). In this context, Krzywdzinski et al. (2023) show how Germany is doing the splits between remaining competitive and protecting workers from losing their jobs. In sum, this 2x3 factorial design allows me to test all the theoretical implications from the literature that I developed above such as negativity bias and the distance of the politician's source cue to the policy.

<u>Figure 1</u> presents the vignette of the homosexual politician expressing his support for the LGB policy. All vignettes can be found in the <u>Appendix</u>. The name of the politician, the picture, and the design of the social media platform are unrelated to any known politician or social media platform. This has the advantage of reducing the possible partisan bias or spillover of the reputation of a social media platform on the policy evaluation. Additionally, the respondents were informed that they should assume that the politician is close to their ideological stance

and political affiliation as answered beforehand. In the context of German political reality, it is plausible to assume that a conservative or right-leaning politician is homosexual or supportive of LGB issues. For instance, one of the leading figures of the right *Alternative für Deutschland* (Alternative for Germany, AfD) is openly homosexual, as demonstrated by Turnbull-Dugarte and López Ortega (2023) the AfD pretends to protect homosexuals to reject immigration, and it was under the government of the conservative *Christlich Demokratische/Soziale Union* (Christian Democratic/Social Union, CDU/CSU) that the same-sex marriage law came to vote in the parliament in 2017.



11. April 2024 14:23 Uhr

Es braucht eine Änderung im Grundgesetz zum expliziten Verbot der Diskriminierung aufgrund der sexuellen Orientierung. Als Bundestagsabgeordneter setze ich mich dafür ein. #LGBT+



Figure 1. LGB Vignette with Pride Flag Treatment.

The survey was only available for German citizens aged 18 or older to reduce bias that comes from different cultural or institutional backgrounds. This target group was also chosen because they represent the share of the population that is eligible to vote in German national elections which – given that the politician is supposed to be a deputy of the Parliament (Bundestag) – adds to the survey setting being as close to reality as possible.

The survey was evaluated positively by the Ethics Committee of the University of Barcelona in March 2024 (Appendix Figure A7.). It was conducted using the survey tool *Qualtrics* which randomly assigned the participants to the treatment and the policy. Further, participants were recruited using my private network as well as the online platform *clickworker*. *Clickworker* is a crowdsourcing platform that allows researchers to recruit individuals for their survey tasks, offering the advantage of obtaining a more diverse sample. Consequently, this leads to more generalizable and representative results compared to the standard practice of using students for surveys. In the case of this survey, respondents recruited on this platform received a small compensation of 1,10 to 1,20 euros.

Data, Variable Description, and Operationalization

After closing my survey, I was left with N = 1292 observations. From this, I removed participants who did not fully complete the survey or did not have German citizenship which left me with a total of N = 1179 participants. Non-Germans were removed to rule out confounders like

different cultural or institutional backgrounds. Respondents who did not finish the survey were on average a bit older than my average sample, equally divided into men and women, rather born in Germany and living in the former West Germany. <u>Table 1</u> shows how policy and treatment were distributed among the sample in absolute and relative numbers.

Policy	Control	Treatment	Total
LGB			
n	196	201	397
%	49.37	50.63	100
AI negative			
n	197	194	391
%	50.38	49.62	100
AI positive			
n	193	198	391
%	49.36	50.64	100
Total			
n	586	593	1179
%	49.70	50.30	100

Table 1. Distribution of Treatment an

As can be seen, treatment is distributed quite equally, both in total and within policies. Additionally, I performed a multinomial logistic regression to prove that being treated or not cannot be predicted by the characteristics of the respondents. I, therefore, regressed treatment on age, gender, ideology, party affiliation, religiosity, living situation (rural-urban, West and East Germany), and education (higher secondary, university studies, vocational training). Results imply that the model is not distinguishable from the null model as the likelihood ratio chi-square test was not statistically significant (p = .816) (Appendix A1). The appendix further provides a table with a balance check that overviews the demographic variable and some variables concerning attitudes and contact with AI and LGB by treatment and policy (Appendix A2). There are no imbalances to be found. Both ultimately verify that the randomization worked correctly.

Once they had read the post, respondents were asked to rate their level of support on a sixpoint scale from "I fully support" to "I fully reject". This presents my main dependent variable. As I proposed, emotions play an important role in the evolution of policies and ultimately their support. Besides the support question, I added statements on how the post and the proposed policy made the participants feel. I covered a range of three negative (anger, disgust, and worry) and three positive feelings (enthusiasm, optimism, and satisfaction) that participants had to rate on a four-point scale from "I fully agree" to "I fully disagree". These are next to my demographic variables the most important variables included in the survey.

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
Main Variables							
Treatment	2	0	0.5	0.5	0	1	1
Policy	3	0	1	0.8	0	1	2
Support	6	0	3.1	1.3	0	3	5
Anger	4	0	0.3	0.3	0	0.3	1
Disgust	4	0	0.2	0.3	0	0	1
Worry	4	0	0.4	0.3	0	0.3	1
Enthusiasm	4	0	0.4	0.3	0	0.3	1
Optimism	4	0	0.5	0.3	0	0.3	1
Satisfaction	4	0	0.5	0.3	0	0.3	1
Demographic Variables							
Gender	3	0.9	0.5	0.5	0	1	1
Age	59	0	40.1	13.1	18	38	77
Urban	6	0.2	0.5	0.4	0	0.5	1
Education	3	0.5	0.7	0.4	0	1	1
ldeology	11	0.3	0.4	0.2	0	0.4	1
East Germany	3	0.1	0.2	0.4	0	0	1
Religiosity	5	3.3	0.3	0.3	0	0.3	1

Table 2. Summary Statistics.

<u>Table 2</u> provides an overview of the descriptive statistics. The first block contains the main variables such as treatment, outcome, and potential mediators. The treatment (0 and 1) is equally distributed which can be seen by the mean that is 0.5. Further, we see that the policies (0 to 2) are also evenly distributed as both the mean and the median are 1. The outcome variable *support* takes values from 0 (fully reject) to 5 (fully support). Overall, independent of the content of the policy, the policies were slightly supported by the respondents (3 = rather support). In terms of emotions, after normalizing the means shows that people usually tend to rather disagree with any of the feelings (0 = fully disagree). Especially strong is the overall disagreement with the feeling of being angry and feeling disgusted. In the heterogeneity analysis, I will check whether this is different for the type of policy.

The second block presents some basic demographic variables such as gender, age, and ideology. Even though the survey offered the option of choosing trans and non-binary as a gender option only a few participants (in total 4, 2 trans and 2 non-binary) did which is why I recoded the gender variable to a binary variable (0 = women) for easier interpretability. Nevertheless, throughout my whole analysis, I always ran all calculations including these two options but did not find any different results than using the binary variable. Similarly, I transformed the answers on education (0 = Lower Secondary), studies (0 = not studied), vocational training (0 = no vocational training), and knowledge about AI and the pride flag (0 = do not know) into binary variables. Lastly, I normalized the variables for ideology (0 = left), rural-urban (0 = urban), and religiousness (0 = not religious). Similarly, I normalized the attitudes toward AI and homosexuals and calculated the average attitude (0 = positive attitudes).

We can see that the sample is quite balanced in terms of gender as we have a mean of 0.5. However, the median reveals that there is a slightly higher presence of men (= 1). Further, the mean age is 40.1 which is four and a half years younger than the German average of 44.6 years (Statistisches Bundesamt, 2024a). This deviance can be explained by the mode in which the survey was conducted. The survey was purely conducted online. According to the German Federal Statistical Office (2024b), there is a 10-percentage point drop in internet usage from the age group of 45-64 compared to 65-74 in internet usage which is likely to continue with older age. Therefore, this result is not surprising. Further, we can see that the sample on average lives in medium-sized towns of 20,000 to 100,000 inhabitants, completed higher secondary education, is Western German, on average rather not religious and balanced in terms of ideology, however, slightly left-leaning. Other questions in the survey asked for studies, vocational training, attitudes towards and contact with homosexuals and AI, sexual orientation, and the knowledge of what AI and the pride flag are. The individual questions of the survey and their recoding can be viewed in the <u>Appendix</u>.

Departing from this overview, I define my baseline model as follows:

$$support_i = \alpha + \beta treatment_i + \varepsilon_i$$

This formula regresses support on treatment and hence calculates the Average Treatment Effect (ATE) which is in essence the difference in the average support for the policies between the control and the treatment group. To this simple model, the demographic variables will be added in the next step. In a third model, the measures for attitudes, contact, sexuality, and knowledge about AI and the pride flag are added henceforth Contact model and, lastly, the emotions are added in model four (Emotions model) to achieve a more precise estimate of the treatment effect.

Results

Figure 2 shows the distribution of the outcome variable *support* per policy. A first pattern is recognizable. Whereas support for the LGB policy is rather gradually rising and more evenly distributed among the six values on the evaluation scale, support for the AI policies peaks at *rather support*. This is interesting in two regards. First, it shows that in my sample opinions about LGB rights seem to be more contested due to the more even distribution on the support scale. Second, the AI policies both deal with the same issue of how politics should deal with AI. The pattern on the support scale being overall similar for both policies shows that there is no clearly preferred way of how to deal with AI in my sample. This is further underlined by respondents' answers peaking at rather support which is not a strong statement overall.





Looking now at how support is distributed among the policies depending on being in the control or treatment groups provides insights into policy support and foreshadows the results. The bar plot in Figure 3 shows the average support in the 2x3 factorial design with 0 being *fully rejected* and 5 (not on the graph) being *fully supported*. The average support circles around the value 3 meaning that participants in the sample on average rather support the proposed policy. However, there are differences among the policies. The policy that received overall the most support regardless of whether the participants were being treated or not is the LGB policy with average support of 3.26 in the control and 3.23 in the treatment group. For the Al-positive policy, a similar pattern is observable, namely, support is lower in the treatment compared to the control group. Only for the Al negative policy, an increase is noticeable in the treatment group compared to the control group. Even though these are quite interesting observations, the 95% confidence intervals of the control and treatment groups are overlapping for each of the policies hinting towards the pride flag treatment not being significant overall.



Figure 3. Average Support per Policy and Treatment Condition.

To get a more complete picture of the factors influencing policy support, <u>Table 3</u> provides the ordinary least square (OLS) estimates of the baseline model as defined above. Model (2) adds demographic variables, model (3) adds variables for contact with and attitudes and knowledge about AI and LGB, and lastly model (4) adds emotions to the model. At first sight, the results indicate that the treatment has no significant effect on policy support across the models which is consistent with hypothesis 1 that there is no difference in support in the whole sample. Despite the treatment coefficient being very small and non-significant, it is worth looking at its development from model to model and the corresponding standard deviations. While the treatment coefficient is gradually increasing with more variables added which means that the variables are important for the understanding of the real effect of the treatment on policy support, the standard deviation is overall decreasing indicating more precise measurement.

	Dependent variable: Support				
	Baseline (1)	Demographics (2)	Contact (3)	Emotions (4)	
Treatment	0.004 (0.074)	0.044 (0.076)	0.051 (0.076)	0.059 (0.052)	
AI negative		-0.243*** (0.093)	-0.227** (0.092)	-0.068 (0.064)	
AI positive		-0.324*** (0.094)	-0.331*** (0.093)	-0.149** (0.065)	
Age		-0.006* (0.004)	-0.006 (0.004)	-0.007*** (0.003)	
Very Religious		0.115 (0.131)	0.320 ^{**} (0.137)	0.137 (0.095)	
Ideology		-0.954*** (0.262)	-0.622** (0.268)	-0.548*** (0.185)	
Die Grünen		0.478 ^{***} (0.172)	0.300 [*] (0.176)	-0.038 (0.121)	
SPD		0.466 ^{***} (0.176)	0.298 [*] (0.178)	-0.007 (0.122)	
Pupil, Student, Trainee		-0.340** (0.154)	-0.267 [*] (0.155)	-0.196 [*] (0.107)	
Contact AI: rarely			0.028 (0.125)	0.156 [*] (0.086)	
Contact AI: never			-0.014 (0.256)	0.390 ^{**} (0.177)	
Attitudes to Homosexuals			-0.990*** (0.206)	-0.243 [*] (0.147)	
Knowledge Al			-0.159 (0.151)	-0.182 [*] (0.106)	
Anger				-0.198 (0.156)	
Disgust				-0.569*** (0.168)	
Worry				-0.674 ^{***} (0.122)	
Enthusiasm				1.010 ^{***} (0.158)	
Optimism				0.790 ^{***} (0.176)	
Satisfaction				1.134 ^{***} (0.178)	
Constant	3.080*** (0.053)	3.549*** (0.288)	3.640 ^{***} (0.379)	2.809 ^{***} (0.276)	
Root Mean Squared Error	1.274	1.226	1.196	0.818	
Observations R ²	1,179 0.00000	1,090 0.080	1,078 0.126	1,078 0.592	

Table 3. OLS Regression Model.

Note:

*p<0.1; **p<0.05; ***p<0.01

With regards to the other variables in the model, expectedly, support varies largely with the proposed policy. In particular, the LGB policy receives the highest levels of support which the descriptive statistics already hint towards. The AI negative policy is better evaluated than the Al positive, however, in model (4) there is no significant difference in the support for the LGB and the AI negative policy. For both policies, we see that the difference in support with respect to the LGB policy is decreasing with each model. Further, with increasing age, support is reduced significantly, though not for model (3), and being religious only significantly increases support in model (3). Ideology is significant in all of the models and suggests that a more rightleaning ideology is reducing support. In terms of party affiliation in the second model, we can see that identifying with either the Green Party or the SPD increases support for the policies positively and significantly. This effect becomes less significant in model (3) and vanishes when emotional controls are added in model (4). Through models (2) to (4) being a student, pupil, or trainee is significantly reduces policy support, besides that rarely having contact with Al significantly increases policy support whereas knowing what Al is is reducing it significantly. Further, independent of the policy, having negative attitudes towards homosexuals significantly reduces support across treatment and control groups alike in models (3) and (4). Lastly, all of the emotions, with the exception of anger, are significantly influencing policy support. The more a respondent agrees with the negative feelings of disgust and worry, the lower the support. Whereas an increase in positive feelings and here especially enthusiasm and satisfaction increase support significantly. Other control variables such as gender, rural-urban, country of birth, living in former East or West Germany, other parties, any kind of educational variables, etc., are omitted in the OLS regression table as they are non-significant.

This means overall that having a pride flag next to the name of the politician does not significantly increase policy support across the three policies. Model (4) has the best explanatory power as the R-squared is more than four times as high as model (3). This is supported by the root mean squared error that captures the prediction accuracy of the model with regard to the outcome variable policy support. Therefore, model (4) will be the model referred to in the remainder of the paper when doing other analyses.

Heterogeneity Analysis

This rather general view on the causal relationship between the presence of the pride flag in a social media post and policy support reveals valuable insights. However, it is important to acknowledge, that the effect might not be the same among all subgroups. As formulated in hypothesis 2, I expect variation especially when it comes to age, gender, ideology, religion, and education.

		Dependent variable: Support				
	Age	Gender	Ideology	Religion	Education	
	(1)	(2)	(3)	(4)	(5)	
Freatment	0.262	0.132 [°]	0.163	0.083	0.076	
	(0.170)	(0.079)	(0.124)	(0.072)	(0.100)	
Age	-0.004	-0.007***	-0.007***	-0.007***	-0.007***	
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	
Al negative	-0.065	-0.068	-0.067	-0.067	-0.068	
	(0.065)	(0.064)	(0.065)	(0.065)	(0.065)	
AI positive	-0.148**	-0.146 ^{**}	-0.149**	-0.150 ^{**}	-0.149 ^{**}	
	(0.065)	(0.065)	(0.065)	(0.065)	(0.065)	
<i>M</i> en	0.035	0.095	0.031	0.031	0.031	
	(0.058)	(0.078)	(0.058)	(0.058)	(0.058)	
/ery Religious	0.137	0.137	0.142	0.179	0.136	
	(0.095)	(0.095)	(0.095)	(0.130)	(0.095)	
deology	0.549 ^{***}	0.550 ^{***}	-0.418 [*]	0.546 ^{***}	-0.548 ^{***}	
	(0.185)	(0.185)	(0.233)	(0.185)	(0.185)	
ligher Secondary	-0.036	-0.040	-0.038	-0.037	-0.025	
	(0.071)	(0.071)	(0.071)	(0.071)	(0.093)	
Norking < 30h/week	-0.140	-0.150 [*]	-0.149 [*]	-0.147*	-0.147 [*]	
	(0.087)	(0.087)	(0.087)	(0.087)	(0.087)	
Pupil, Student, Trainee	-0.188 [*]	-0.196 [*]	-0.195 [*]	-0.197 [*]	-0.196 [*]	
	(0.107)	(0.107)	(0.107)	(0.107)	(0.107)	
Contact AI: rarely	0.158 [*]	0.156 [*]	0.156 [*]	0.156 [*]	0.156 [*]	
	(0.086)	(0.086)	(0.086)	(0.086)	(0.086)	
Contact AI: never	0.400 ^{**}	0.397 ^{**}	0.390 ^{**}	0.385 ^{**}	0.388 ^{**}	
	(0.177)	(0.177)	(0.177)	(0.177)	(0.177)	
Attitudes to Homosexuals	-0.245 [*]	-0.237	-0.247 [*]	-0.243 [*]	-0.242 [*]	
	(0.147)	(0.147)	(0.147)	(0.147)	(0.147)	
Knowledge AI	-0.181 [*]	-0.182 [*]	-0.183 [*]	-0.180 [*]	-0.182 [*]	
	(0.106)	(0.106)	(0.106)	(0.106)	(0.106)	
Disgust	-0.561 ^{***}	-0.573 ^{***}	-0.564 ^{***}	-0.567***	-0.570***	
	(0.168)	(0.168)	(0.168)	(0.168)	(0.168)	
Vorry	-0.670***	-0.679***	-0.671 ^{***}	-0.675 ^{***}	-0.675***	
	(0.122)	(0.122)	(0.122)	(0.122)	(0.122)	
Enthusiasm	1.014 ^{***} (0.158)	(0.122) 1.009 ^{***} (0.158)	1.003 ^{***} (0.159)	1.011 ^{***} (0.159)	(0.159)	
Dptimism	0.799 ^{***}	0.781 ^{***}	0.790 ^{***}	0.789 ^{***}	0.790 ^{***}	
	(0.176)	(0.176)	(0.176)	(0.176)	(0.176)	
Satisfaction	1.127 ^{***}	1.140 ^{***}	1.146 ^{***}	1.134 ^{***}	1.132 ^{***}	
	(0.178)	(0.178)	(0.178)	(0.178)	(0.178)	
reatment x Age	-0.005 (0.004)	-0.129 (0.105)	()	. ,	. ,	
reatment x Men	· · ·	-0.129 (0.105)				
reatment x Ideology			-0.233 (0.253)			
reatment x Very Religious				-0.082 (0.174)		
reatment x Higher Secondary					-0.023 (0.117)	
Constant	2.695 ^{***}	2.781 ^{***}	2.741 ^{***}	2.790 ^{***}	2.800***	
	(0.291)	(0.277)	(0.286)	(0.279)	(0.281)	
Root Mean Squared Error	0.817	0.817	0.817	0.817	0.817	
Dbservations	1,078	1,078	1,078	1,078	1,078	
R ²	0.592	0.592	0.592	0.592	0.592	

 Table 4. OLS Regression Models - Heterogeneity Analysis.

Note:

^{*}p<0.1; ^{**}p<0.05; ^{***}p<0.01

Therefore, I conducted a heterogeneity analysis by interacting the treatment variable with the relevant independent variables to investigate whether these differences exist and how strong they are. <u>Table 4</u> presents the OLS regression results of this exercise. Interacting the treatment with gender results in a positive treatment effect that is statistically significant on a 10 percent level. However, neither the gender coefficient nor the interaction term are significant for model (2) which means that the effect of the treatment does not vary for men and women in the end. Still, including the interaction term results in the treatment being significant compared to the model without interaction. The reason for this is that the inclusion of the interaction term better accounts for the subtle variation related to gender in the data, ultimately resulting in the pride flag treatment being significant. This translates to individual support increasing by 0.132 or 2.64% on the support scale from 0 to 5 when the policy is presented by a homosexual politician and gender differences are being taken into account.

As for the other interactions (age, ideology, religion, and having higher secondary education), there is no significant effect of the treatment on policy support to be found. Besides that the results equal the model (4) results of Table 3. This means the coefficient for the AI negative policy is negative but insignificant and the emotions are all significant except for anger with the exception of a new employment category that significantly and negatively influences support in all models except the age model, namely working less than 30 hours per week. Once again, the large role of emotions in explaining support becomes apparent as all emotions except for anger (not in the table) are significant and influence support in the expected direction. Additionally, I ran a heterogeneity analysis interacting the treatment with rural-urban, contact with LGBT, and attitudes towards homosexuals all of which gave me no significant outcomes for either the treatment or the interaction term (Appendix A3.). These results lead to the overall rejection of hypothesis 2. In my sample, there is no evidence that a specific subgroup such as defined by Abou-Chadi and Finnigan (2019) and Magni and Reynolds (2021) reacts differently to the presence of the pride flag next to the politician's name in a social media post. However, there is slight evidence that there might be a gender difference with regard to homosexual politicians.

Even though the results are overall not significant it can bear interesting findings to look at the moderators more in detail to verify if the tendency of the moderator's direction coincides with what the literature suggests. Figure 4 presents the interaction plots for different relevant moderators allowing us to see how support changes across various levels of these moderators all else equal. First, looking at ideology (Figure 4A) shows that the support level decreases with the treatment for respondents on the right ideological spectrum whereas an increase is noticeable for the individuals in the middle and left of the spectrum. It is noteworthy that for the latter the increase is the most pronounced. This might be explained by the fact that being LGB is closely linked to being associated with the political (center) left (Turnbull-Dugarte, 2020). Additionally, it might be that people on the political right do not correctly identify the pride flag

as they might not know it. Analyzing my data with regards to this shows clearly that the percentage of respondents correctly identifying the pride flag decreases with more right ideology. This might also affect the overall effectiveness of the treatment as I will discuss later in the limitations.



Figure 4. Moderator Analysis for Ideology, Age, Religion, and Gender.

Another interesting moderator is age (Figure 4B). In order to get nicely interpretable and clear results I computed four age groups in roughly 15-years steps. Overall, it can be said, that the youngest group (aged 18 to 34) shows the highest average support in both the control and the treatment group whereas the oldest cohort (65+) supports the least. This latter can be due to several reasons. First, this group is about to retire or has already retired which means that losing their job to AI has a low impact on their lives, and at the same time they might be less inclined to economic well-being as their pension is guaranteed and they possibly made private provisions and secured themselves. In contrast, the youngest cohort is dependent on a well-

functioning economy and job stability to make their livelihoods and accumulate welfare. Comparing control and treatment we see an increase in average support for the two younger cohorts (18-49) whereas the support of the 50–64-year-olds decreases slightly and the support for the oldest cohort is not changed. However, these results are mere tendencies and cannot be taken as absolute facts as the confidence intervals, especially for the 65+ group are very large and not significant.

Surprisingly and contrarily to Magni and Reynolds (2021), when looking at religion (Figure 4C), the average support of rather religious individuals seems to be higher in my sample compared to those who claim themselves not to be religious. This is true for both, the control and treatment groups. However, the increase in predicted support increases negatively with being religious therefore indicating some bigger reservation among rather religious individuals within my sample toward homosexual politicians. For the comparison of men and women, it appears that men's support exceeds women's support in the control group which might be due to ingroup bias where men are more easily trusting a man than women. In the treatment condition, this relationship is reversed, and women are more supportive than men, hence women have a higher jump in their average support from the control to the treatment condition than men. This follows the logic of Barrantes and Eaton (2018) that homosexual politicians are perceived as being more feminine. Hence, it is likely that women feel closer to homosexual politicians and rather support their policies over heterosexual politicians.

Hitherto, the analysis focused on support for any of the three policies. However, as elaborated above, the literature suggests that support depends on the content of the policy. Therefore, it sounds sensible to interact the treatment with the policy or divide the sample by policy and run the analysis. Doing this left me, however, without any significant result for the treatment variable. This is rather unsurprising for two reasons. First, the policies are likely to have an ideological subtone – even though this was tried to be ruled out as much as possible in the designing of the posts. Second, the current political reality in Germany is that the government parties are rather on the liberal-left spectrum ideological spectrum and hence in people's minds policy proposals might have a party and therefore ideological coloring. Therefore, and as ideology is always significant in the regressions up to now, it might make sense to take ideology in this policy analysis into consideration.

<u>Table 5</u> shows the results of this analysis. Models (1) to (3) show the results in the policy subgroups where the treatment is interacted with ideology. Model (4) uses a triple interaction with treatment, policy, and ideology for the whole sample. Results show that for the LGB policy (model (1)) the treatment is positive and statistically significant indicating that having the pride flag next to the name of the politician in a social media post positively influences policy support. Although the ideology variable is not significant in its own meaning in the absence of the treatment, ideology does not play a role in the LGB policy, the interaction term is significant and in the anticipated direction. Being in the treatment group modifies the effect of ideology in such

a way that support is lowered. Support is also negatively influenced by not having contact with members of the LGBT community and having negative attitudes towards homosexuals, whereas the knowledge of the pride flag significantly increases policy support. In summary, when only taking into account the LGB policy and the subtle variation in the data with respect to ideology the treatment is significant and positive translating into a 0.422 or 8.44 percent increase on the support scale.

		Dependent	<i>variable:</i> Support	
	LGB (1)	AI negative (2)	AI positive (3)	Interaction (4)
Freatment	0.422*	0.012	-0.057	0.403*
	(0.244)	(0.210)	(0.199)	(0.225)
deology	-0.308	-0.664*	-0.111	-0.714**
	(0.429)	(0.399)	(0.402)	(0.354)
AI negative				-0.253
				(0.218)
AI positive				-0.356
				(0.230)
Age	-0.001	-0.008*	-0.010**	-0.007***
	(0.005)	(0.005)	(0.005)	(0.003)
Men	0.070	-0.049	0.190*	0.033
	(0.104)	(0.106)	(0.099)	(0.058)
/ocational Training	0.032	0.222**	0.057	0.083
	(0.121)	(0.111)	(0.113)	(0.064)
Norking < 30h/week	-0.152	-0.200	-0.122	-0.156 [*]
	(0.176)	(0.146)	(0.142)	(0.087)
Pupil, Student, Trainee	-0.318	-0.210	0.038	-0.199*
	(0.194)	(0.197)	(0.173)	(0.107)
Contact LGBT: never	-0.509**	-0.038	0.044	-0.162
	(0.208)	(0.193)	(0.176)	(0.108)
Contact AI: rarely	0.198	0.026	0.116	0.154*
-	(0.153)	(0.159)	(0.140)	(0.086)
Contact AI: never	0.773**	-0.175	0.304	0.393**
	(0.332)	(0.331)	(0.294)	(0.177)
Attitudes to Homosexuals	-0.732**	-0.083	-0.145	-0.248*
	(0.300)	(0.245)	(0.264)	(0.147)
Attitudes to AI	0.169	0.802**	-0.017	0.266
	(0.356)	(0.363)	(0.369)	(0.193)
Knowledge Al	-0.335	0.193	-0.353**	-0.179 [*]
-	(0.205)	(0.189)	(0.176)	(0.105)
Knowledge Pride Flag	0.338**	0.099	-0.233	0.008
	(0.166)	(0.147)	(0.153)	(0.086)
Anger	-0.240	0.021	-0.427*	-0.191
5	(0.281)	(0.287)	(0.257)	(0.156)
Disgust	-0.235	-0.491	-0.101	-0.529***
5	(0.309)	(0.310)	(0.299)	(0.168)

Table 5. OLS Regression Model Policy x Ideology

Worry	-1.257 ^{***} (0.250)	0.020 (0.209)	-0.688 ^{***} (0.210)	-0.661 ^{***} (0.122)
Enthusiasm	0.394 (0.319)	1.153 ^{***} (0.267)	1.014 ^{***} (0.274)	0.967 ^{***} (0.158)
Optimism	0.923 ^{***} (0.348)	0.342 (0.298)	0.867*** (0.294)	0.766 ^{***} (0.176)
Satisfaction	1.122 ^{***} (0.358)	1.415 ^{***} (0.304)	0.877*** (0.292)	1.142 ^{***} (0.178)
Treatment:Ideology	-0.801 [*] (0.477)	0.303 (0.436)	-0.005 (0.429)	-0.729 [*] (0.441)
Treatment:AI negative				-0.394 (0.303)
Treatment:AI positive				-0.259 (0.307)
Ideology:AI negative				0.263 (0.449)
Ideology:AI positive				0.614 (0.477)
Treatment:Ideology:AI negative				1.114 [*] (0.608)
Treatment:Ideology:AI positive				0.239 (0.627)
Constant	2.862*** (0.528)	1.942 ^{***} (0.490)	2.895 ^{***} (0.485)	2.914 ^{***} (0.317)
Root Mean Squared Error	0.802	0.76	0.704	0.811
Observations	363	362	353	1,078
R ²	0.715	0.551	0.626	0.598
			* • •	**

Note:

^{*}p<0.1; ^{**}p<0.05; ^{***}p<0.01

For the subgroups of the two AI policies, the treatment remains insignificant. Only in model (4) the treatment, ideology, and two of the seven interaction terms are significant. All else equal, having the pride flag next to a politician's name increases policy support by 0.403 or 8,06 percent. Contrary to model (1) it appears here that in the absence of treatment and LGB policy, a more right-leaning ideology is significantly decreasing policy support by 0.714. This becomes even more pronounced as treatment is 1 and policy is LGB as it decreases support by an additional 0.729. Lastly, there is an additional positive effect of the AI negative policy. Support increases by 1.114 for respondents who receive the treatment and a one-unit increase in being on the ideological spectrum. These results also help to reject hypotheses 4 and 5. Hypothesis 4 posits that the difference in policy support between control and treatment groups is smallest for the LGBT policy. This is not true as both approaches in Table 5 show that the treatment coefficient is largest and statistically significant only in the LGB subsample and the two AI coefficients are negative in model (4) therefore reducing the significant treatment effect.

Mediation Analysis

Establishing causality is one important step in analyzing social phenomena. However, it is just as important to try to uncover the underlying mechanism that mediates the causal relationship to better understand the dynamics of public opinion and political decision-making. As elaborated earlier, support might be either mediated by an individual's attitudes towards homosexuality that spill over onto the policy evaluation or emotions or both. That is why, on the one hand, I included the evaluation of three statements concerning homosexuals and homosexuality in the survey. Namely, respondents were asked to indicate on a four-point scale whether they agreed or disagreed with the statement that homosexuals should be able to freely show affection in public, that they should be allowed to adopt children and one reversed item stating that homosexuality is a sign of moral decline in Germany. On the other hand, I asked for an emotional evaluation of the proposed policy in the survey. Specifically, after showing participants the social media post and asking them the main outcome variable, they had to rate on a scale from 1 (fully agree) to 4 (fully disagree) whether the policy made them angry, disgusted, worried, enthusiastic, optimistic, or satisfied respectively. As elaborated earlier, according to the literature, I expected anger and disgust to be the main driver, especially among men.

Methodologically, I follow the approach to mediation analysis by Imai et al. (2013). They propose a way to find direct and indirect effects in single experimental designs. This is done by resampling the data, calculating the relevant linear regression model repeatedly – so-called nonparametric bootstrapping – and aiming at having significant estimates for the mediated, direct, and total effects. Thereby, the indirect effect captures how the mediator(s) of interest change when the treatment is present whereas possible other causal mechanisms are summarized in the direct effect. Applied to my case, this means that the indirect effect measures how emotions and here in particular anger and disgust influence policy support when the pride flag is present in the social media post. The direct effect would then capture other possible causal mechanisms such as rational or moral considerations.

Figure 5 shows the results from the mediation analysis with 1000 iterations. Panel A shows the plots of the mediation results for the two emotions *Anger* and *Disgust* while Panel B shows the plots of the mediation results for the attitudes towards homosexuals' adoption right and homosexuality as a sign of moral decline. While the mediation analysis was run as well for the remaining four emotions and the statement that homosexuals should be able to show affection in public, they follow the same pattern and were therefore omitted.



Figure 5. Mediation analysis for Emotions (A) and Attitudes towards Homosexuals (B) and their 90% Confidence Intervals.

A close look at the results reveals two insights. First, the value of interest is the mediated effect that would theoretically tell whether the mediator is causal for the effect treatment has on the outcome variable and how it is directed. Yet, this value is basically zero for all four depicted possible mediators. Second, all 90 percent confidence intervals include the 0 and are therefore not statistically significant. Therefore, there is neither proof for the mediating role of attitudes towards homosexuals nor emotions as variables that explain the causal pathway from the pride flag treatment to the outcome of policy support.

Possibly if they do not have a mediating effect, they might have a direct effect meaning they should be included as controls in the OLS regression model. This is the reason why <u>Table 3</u>, includes both, the composite attitudes variable and the emotions showing pretty clearly that even though their inclusion does not lead to the treatment being significant, their R-squared and the RSME indicate that the models are more precise and better in explaining the variation of the outcome variable. Besides, we saw that attitudes toward homosexuals and emotions play a significant direct role in policy evaluation. The results of this mediation analysis therefore clearly reject hypothesis 3 and show that emotions in the case of my survey do not have a mediating role in the treatment effect. Yet, their inclusion in my OLS model improves the explanatory power of the model highlighting their relevance as direct predictors.

Robustness

To ensure the robustness and reliability of my nonsignificant findings I applied stricter criteria to my dataset and rerun the models in Table 3. First, I removed participants who failed to pass the attention test. Attention tests are a common tool in survey experiments to check whether respondents carefully read and answer questions. Only including observations with a successful attention test adds a layer of credibility to my results as it implies that respondents were overall more likely to carefully read the questions and therefore also give better e.g., more reliable answers. Second, I checked my raw data for duplicates in the IP addresses and removed them. IP addresses serve to clearly identify the device from which the survey was taken. Having duplicates in the IP addresses might imply that the same person submitted the survey multiple times therefore violating the integrity of the survey. Yet, as I spread the survey also within my private network it is likely that the same device was just passed on within a household to fill out the survey. To rule out any outside manipulation attempt I excluded them for this robustness check. Lastly, my survey was distributed using an anonymous link which technically enables an individual to participate as many times as they want. In this regard, it happened various times that respondents who were sorted out for not having German citizenship retook the survey and just ticked yes for the nationality question. Therefore, I excluded these cases to ensure that only participants with the right to vote in Germany participated. This reduced my sample to N = 999. Table 6 presents the results.

		Dependent variable: Support			
	Baseline (1)	Demographic (2)	Contact (3)	Emotions (4)	
reatment	0.026 (0.082)	0.056 (0.084)	0.059 (0.083)	0.015 (0.055)	
\I negative		-0.301*** (0.101)	-0.271*** (0.101)	-0.087 (0.068)	
AI positive		-0.331***	-0.344***	-0.189***	
Age		(0.104) -0.006	(0.103) -0.006	(0.070) -0.006 ^{**}	
Men		(0.004) -0.086	(0.004) -0.007	(0.003) 0.013	
Very Religious		(0.090) 0.113	(0.093) 0.382**	(0.061) 0.096	
		(0.149) -1.013***	(0.156) -0.640**	(0.103) -0.532***	
deology		(0.290)	(0.296)	(0.196)	
CDU/CSU		0.311 [*] (0.162)	0.147 (0.165)	0.046 (0.109)	
Die Grünen		0.481 ^{**} (0.189)	0.238 (0.193)	-0.072 (0.128)	
SPD		0.497** (0.195)	0.257 (0.198)	-0.052 (0.131)	
Working < 30h/week		-0.165 (0.146)	-0.157 (0.146)	-0.165 [*] (0.097)	
Contact AI: rarely		(0.140)	0.104	0.206**	
Contact AI: never			(0.135) -0.102	(0.089) 0.208	
Being a Gay Man			(0.330) 0.651**	(0.219) 0.303	
Being a Lesbian Woman			(0.323) 0.777*	(0.214) 0.506 [*]	
Being bisexual			(0.462) 0.415 ^{**}	(0.306) 0.169	
Sexuality: Do not know			(0.178) -0.705 [*]	(0.118) -0.613**	
Attitudes to Homosexuals			(0.405) -1.166 ^{***}	(0.268) -0.197	
			(0.226)	(0.155)	
Attitudes to AI			-0.101 (0.305)	0.247 (0.203)	
Knowledge Al			-0.090 (0.176)	-0.102 (0.119)	
Knowledge Pride Flag			0.127 (0.139)	0.046 (0.092)	
Anger			(0.100)	-0.210	
				(0.166)	

Table 6. OLS Regression Model – Robustness.

Disgust				-0.641***
				(0.180)
Worry				-0.629***
				(0.127)
Enthusiasm				1.119***
				(0.165)
Optimism				0.654***
				(0.193)
Satisfaction				1.274***
				(0.189)
Constant	3.058***	3.595***	3.466***	2.628***
	(0.058)	(0.325)	(0.436)	(0.305)
Root Mean Squared Error	1.293	1.238	1.201	0.789
Observations	999	927	917	917
R ²	0.0001	0.084	0.139	0.628
Note:			*p<0.1; **	p<0.05; ***p<0.01

The results remain insignificant and are overall quite similar to my main results. However, some small differences are for instance that the significance of the party affiliation already disappears in model (3). Further, it seems that sexual orientation plays a bigger role in this sample as identifying as lesbian significantly increases support by 0.506 in model (4). Besides, attitudes towards homosexuals lose their significance in model (4) just as much as the dynamic of not having contact with AI and knowing what AI is. Nevertheless, this provides further evidence that the pride flag next to the name of the politician does not affect policy support in any significant way.

Discussion

Through my survey experiment, I have shown that a social media post having the pride flag next to the politician's name does not significantly increase nor decrease policy support. My heterogeneity analysis revealed significant effects when accounting for subtle gender differences in my sample data by interacting the treatment with the gender variable. Significant effects of the pride flag treatment could also be found when either doing a triple interaction with ideology and policy type or when sub-setting the sample data by policy type and then interacting treatment with ideology. Even though suggested by the literature, neither attitudes towards homosexuals nor emotions have a statistically significant mediating effect on the relationship between the treatment and the outcome variable. Yet, their inclusion in the model adds explanatory power and precision. Lastly, the results remain robust even when applying stricter criteria to the inclusion of observations in the analysis. These findings have several implications for research and beyond.

First, as the only difference between the social media posts was the pride flag next to the name, I could rule out that different evaluations in the significant results are due to the policy per se. This means that the pride flag is causal for increasing policy support for the few significant results that appear in <u>Table 4</u> and <u>Table 5</u>. As the pride flag is the source cue for the sexual orientation of the politician, I infer that a homosexual politician receives significantly higher support when controlling for interactions with policy type, ideology or gender. This is in line with the literature: the treatment is positive due to the fact that homosexual men do not suffer a penalty when compared to heterosexual men and have even a slight advantage when compared to heterosexual women (Barrantes & Eaton, 2018). This is also in line with Magni and Reynolds (2021) who found that voters in New Zealand prefer a gay over a straight politician. Just as much the positive treatment effect suggests that people are more likely to support a policy by a homosexual politician over heterosexual politicians.

These results need to be treated carefully however as the effect is only significant in some very specific subgroups. The reason for the treatment not being significant in the overall sample might be due to the sample size, other confounders that were not captured in my survey, heterogeneous effects, or the model itself. An indicator for this might be the R-squared in <u>Table 5</u> which is way higher for the LGB subsample (.715) than for the two AI policies. This suggests that the model fits the LGB subsample much better than the AI subsamples.

Second, there is no proof for the attitudinal spillover theory in my experiment. Since the pride flag next to the name should be seen as a source cue of the politician's sexual orientation, I would have expected that the attitudes that people have towards homosexuals are significant and explain the variation of support depending on the treatment. Yet, the mediation analysis revealed, that the attitudes towards homosexuals do not have a mediating role. However, once added to the model as an explanatory variable the attitudes are statistically significant. The interpretation is that respondents holding more negative attitudes toward LGB individuals are less inclined to support the policy regardless of being treated or not. Reasons for the absence of an attitudinal spillover might be the policies proposed in the posts. Although they were quite realistic and followed the political discourse in Germany, they remained hypothetical which might lead to less engagement, less knowledge, and therefore weak opinions by the participants. Besides as the policies and the politician were not real, it was also not divided along a heterosexual–homosexual line or charged with (non-) homophobic attitudes as it was the case for the health topic in the case of Obama.

Third, emotions did not mediate the effect the pride flag treatment has on policy support. Nevertheless, in line with earlier work on the role of emotions in politics (Marcus, 2000) and policy support (Rodriguez-Sanchez et al., 2018), this experiment backs the role of emotions by showing that emotions – positive and negative – largely explain variations in policy support. Positive emotions about the policy increase support whereas negative emotions decrease support. Worry seems to be the negative emotion that is the most important for not supporting policies. This makes sense given that it is the most moderate negative emotion out of which the participants could choose. Besides, another interesting insight when discussing emotions is that my data shows that once emotions are added party affiliation loses significance. This might hint towards a loss of importance of party affiliation and highlight the complexity of political behavior. As party affiliation might not be enough to receive policy support parties need to adapt their strategies as well to receive the support of the broad public. At the same time, it emphasized the danger of an (over-) emotionalization of politics that might invite to spread of misinformation to get emotional responses thereby further driving polarization and undermining rational discourse.

Additionally, the strong role of ideology in my results also hints in this direction. Adding emotions could not fade out the ideological component of my OLS model suggesting that ideology independently and robustly influences support for policies beyond any affective effect. Even though the correlation between party affiliation and ideology is .54 in my sample, there are likely other factors that an individual form and defines their ideological views on. This could be a promising avenue for future research.

Conclusion

This paper explores the effect of the pride flag's presence on a politician's social media post on policy support. The pride flag functions as a source cue for the politician's homosexuality, however, if present does not significantly increase nor decrease policy support across different kinds of policies except for quite specific subgroups, mainly ideology and gender. This finding contradicts the findings of Magni and Reynolds (2021) in quite an interesting way. They found that citizens seem to penalize being homosexual at the ballot box which leads to an underrepresentation of this minority in parliaments. Picking up right after the elections, my results – even though overall not significant – show that for the few homosexual politicians that attained office as a deputy, chances are high that they receive the same if not higher support for their policy proposals than their heterosexual counterparts. Therefore, I do not find overall discrimination as Magni and Reynolds' (2021) work suggested. This might have practical implications for political parties. First, having homosexual politicians in their party might positively shape the image of a party and increase support. Second, receiving support is crucial for reelection and therefore having a more diverse ballot paper might increase overall vote share and maybe even turnout in the long term.

Even though this paper has several strengths such as highlighting the role of gender, ideology, attitudes, and emotions for policy support, it comes with several limitations. On the one hand, it is possible that the treatment was too weak in the provided setting or among certain subgroups. The former would mean that participants might have paid limited attention to the politician as they were asked to evaluate the policy and not the politician per se. Hence, the pride flag treatment might have gone unnoticed. This subtlety could result in the treatment not being sufficiently impactful to affect participants' perceptions or behaviors measurably. Consequently, the lack of significant results could be due to the treatment's insufficient prominence rather than a genuine absence of effect. Additionally, as elaborated earlier, there is evidence in my sample that individuals who are further on the right ideological spectrum were less familiar with the pride flag being a symbol of the LGBT+ community. This could lead to the treatment groups do not differentiate significantly in this subgroup. Hence, future studies should consider using more pronounced treatments or additional measures to ensure the treatment's salience and understanding to participants. On the other hand, conducting the survey using an online recruitment tool could imply that people are more aware of the survey manipulations. This in turn increases the probability of participants identifying the manipulation and altering their behavior to adhere to desirable answers or willingly giving false answers (reactance).

Another reason for the nonsignificant results might be the sample size. In my pre-analysis plan, I estimated the treatment effect to be 0.3 with a standard deviation of 1. Therefore, my sample size was tailored to these predictions. It seems, however, that the treatment effect across my whole sample is smaller which would have required a larger sample size to get significant results. This is a plausible consideration as the moderator analysis showed that a lot of the direction of my moderators hint in the same direction as the literature suggests, yet not significantly.

Besides these rather technical concerns about the effectiveness of the treatment and problems with the recruitment of participants, there is the problem of external validity. The results of this thesis are correct for my sample, but extrapolation cannot be done without considering the following points. First, the scenario is hypothetical, and the participants were made aware of this fact. Therefore, their real-life choices might alter. Second, as discussed with the summary statistics, the sample is on average close to the characteristics of German society, however, it is possible that it does not capture the nuances of the specific subgroups which limits the generalizability of the findings. Lastly, the specific characteristics of the German political system and culture may produce different results in other countries or for trans or homosexual female politicians.

In terms of policy recommendations, my paper bears some interesting avenues that could be followed. First, the LGB policy received the biggest support in my sample indicating that people are ready to support this policy and the timing might be right to adopt it in the parliament. Interestingly, in view of the rising number of violent crimes against LGBT+ individuals, in May, the federal government's queer commissioner brought the protection of sexual orientation in the German Basic Law back on the table. Further, showing that the support for the AI negative law is higher than the AI positive reveals a pretty clear lack of security among the respondents

of the survey and extrapolated to Germans in general. This is also underlined by the high share of participants who are worried about the policies. Hence, politicians should therefore address this insecurity and offer a perspective in their policymaking.

Future research should focus on testing other mechanisms since attitudes and emotions seem to rather have a direct effect than a mediating effect. Following the tripartite view on policy evaluation by (Rodriguez-Sanchez et al., 2018), it could be wise to test whether rationality or morality can explain why certain policies get supported and others don't. Further, as suggested above, it would be interesting to see if diversity among politicians affects re-election chances, overall satisfaction, or other relevant outcomes for politicians and democracy. The anecdotal evidence from the beginning hints in this direction at least as both Angela Merkel and Barack Obama got reelected.

Acknowledgments

I am grateful for the invaluable knowledge, insights, and feedback of my advisor Aina Gallego. Further, I am very thankful to Macarena Ares for the helpful feedback on the survey and its design.

Appendix

Survey questions and variable Coding in the OLS analysis.

1. Please enter your year of birth. (yyyy) Recoded to age (2024 – yyyy).

2. With which gender do you identify?*Female, Male, Trans, Non-binary, No answer.*Recoded as a dummy variable to 0 = women, 1 = men.

3. Do you have German citizenship? *Yes, No.*

4. Were you born in Germany?Yes, No.Recoded as a dummy variable to 0=yes , 1= no.

5. In which part of Germany do you live? Former West Germany (before 1990 FRG), Former East Germany (before 1990 GDR). Recoded as a dummy variable to 0 = West, 1 = East.

6. Where do you currently live?

Large city (more than 400,000 inhabitants), Large town (100,000 to 400,000 inhabitants), Medium town (20,000 to 100,000 inhabitants), Small town (5,000 to 20,000 inhabitants), Rural town or village (less than 5,000 inhabitants). Normalized to 0 = urban, 1 = rural.

7. Would you consider yourself as a religious person? I am...

Very religious, Rather religious, Rather not religious, Not at all religious, Atheist/Agnostic, No answer.

Not at all religious and Atheist/Agnostic combined and then normalized to 0=Not Religious and 1 = Very Religious.

In politics, people often talk about 'left' and 'right.' How would you generally describe your own political position: Where would you place yourself on this scale?
 Scale from 1 (Left) to 10 (Right).
 Normalized to 0 = left, 1 = right.

9. Which political party appeals to you most? *CDU/CSU, SPD, FDP, Alliance '90/The Greens, The Left, AfD, No answer.*

10. What is the highest general school qualification you have achieved?

Primary school completed but no secondary school qualification, Secondary school certificate, Intermediate school certificate, Technical college entrance qualification, A levels (Abitur) (university entrance qualification).

Dummy for 0 = lower secondary (secondary and intermediate school certificate; not allowed to go to university), 1 = higher secondary (Technical college entrance qualification, A levels

(Abitur); allowed to go to some kind of university). Primary school dropped as only 4 respondents chose this option.

11. What is the highest degree you have obtained?No degree, Bachelor's degree, Master's degree, Diploma or Magister, State examination, Doctorate/Habilitation.Dummy to 0 = not studied, 1 = studied.

12. What is the highest vocational training qualification you have achieved? No vocational qualification, Certificate of basic vocational training, Apprenticeship certificate for medical assistants, Mid-level civil service examination, Completed industrial or agricultural apprenticeship, Completed commercial apprenticeship, Professional qualification from a vocational school, Second vocational training, Master craftsman/technician or equivalent school qualification.

Dummy 0 = no vocational training, 1 = vocational training.

13. Are you currently employed or not? Please select what applies to you. 30 hours per week or more, Less than 30 hours per week, Self-employed, Federal volunteer service, Retired, Housewife/Househusband, Student, Unemployed.

14. Please select 'Do not agree'. Strongly agree, Agree, Do not agree, Strongly disagree.

Text informing about the treatment.

On the next page, you will find a fictional post on any social media platform (e.g., Twitter/X, LinkedIn, Facebook, etc.) from a fictional elected politician. They express their support for a policy. Assume that this politician generally aligns with your ideological preferences and preferred party. Please read the post carefully and then answer some follow-up questions about your personal opinion. Please click Next.

Image copyright: HalloDavidPradoPerucha (2024). Handsome businessman looking into the camera, https://www.freepik.com/free-photo/handsome-businessman-looking camera_28006828.htm#fromView=search&page=1&position=1&uuid=87c507ed-4457-447c a870-e3a1a0ce2cb9.

LGB Policy:

An amendment to the constitution is needed to explicitly prohibit discrimination based on sexual orientation. As a member of the Bundestag, I am committed to this. #LGBT+

Markus B @Marku	0		11. April 2024 14:23 Uhr
Diskriminierung	Änderung im Grundge aufgrund der sexuelle eordneter setze ich mi	n Orientierung. Als	erbot der
♥ 233	e 85	€ 27	\triangleleft

Figure A1. LGB Vignette without Pride Flag Treatment.



A new law is needed to protect jobs from the impacts of AI. As a member of the Bundestag, I am committed to this. #AI

	er Gesetz zum Sc	1 hutz von Arbeitsplätzen v gsabgeordneter setzte ic	
♥ 233	85		\bigtriangledown
Figure A3. AI negative \	/ignette without F	Pride Flag Treatment.	
Markus Bergel @MarkusBerg		1	1. April 2024 14:23 Uhr
		hutz von Arbeitsplätzen v gsabgeordneter setzte ic	
♥ 233	85	✓ 27	\triangleleft
Figure A4. Al negative	√ignette with Prid	le Flag Treatment.	

AI positive Policy:

♥ 233

A new law is needed to promote AI in Germany to increase the efficiency of our economy. As a member of the Bundestag, I am committed to this. #AI

	Markus Berger @MarkusBerger	11. April 2024 14:23 Uhr
die Eff		Förderung der #KI in Deutschland, um u steigern. Als Bundestagsabgeordneter

27

Figure A5. Al positive Vignette without Pride Flag Treatment.

85

 \triangleleft



11. April 2024 14:23 Uhr

Es braucht ein neues Gesetz zur Förderung der #KI in Deutschland, um die Effizienz unserer Wirtschaft zu steigern. Als Bundestagsabgeordneter setzte ich mich dafür ein.



Figure A6. Al positive Vignette with Pride Flag Treatment.

15. What is your stance on the proposed policy in the post? *Strongly support, Support, Somewhat support, Somewhat oppose, Oppose, Strongly oppose.* Recorded to 0 = strongly oppose, 5 = strongly support.

16. Based on the limited information you have: Would you trust the politician? I would... *Fully trust, Trust, Not trust, Not trust at all.*Recoded to 0 = not trust at all, 4 = fully trust.

17. To what extent do you agree with the following statements regarding the policy proposal you just saw? This policy proposal...

...makes me angry. disgusts me. worries me. makes me enthusiastic. makes me optimistic. satisfies me. Answer options: Strongly agree, Agree, Disagree, Strongly disagree. Normalized to 0 = strongly disagree, 1 = strongly agree.

18. To what extent do you agree with the following statements?

18.1 Homosexuals should have the freedom to show their affection in public.

18.2 It is good that homosexuals have the right to adopt children.

18.3 Homosexuality is a sign of moral decline in German society.

Strongly agree, Agree, Disagree, Strongly disagree.

Normalized and combined so that 0 = positive attitudes, 1 = negative attitudes.

19. How often do you have contact with an LGBT+ person (e.g., in the family, among friends, at work, etc.)?

Several times a week, Several times a month, Several times a year, Less often, Never.

20. What does this symbol stand for?
Flag of the LGBT+ movement
Logo of a company that sells fair-trade condoms and period products
Flag of the 'Fridays for Future' movement in Germany
I don't know
Dummy 0 = not knowing, 1 = knowing.

21. Which of the following terms best describes your sexual orientation? *Heterosexual, Gay, Lesbian, Bisexual, I don't know, No answer*

22. To what extent do you agree with the following statements?

22.1 Artificial intelligence is already well-established in the German industry.

22.2 Artificial intelligence significantly contributes to the increase in unemployment in the German labor market.

22.3 Artificial intelligence causes more harm than good to society.

Strongly agree, Agree, Disagree, Strongly disagree

Normalized and combined so that 0 = positive attitudes, 1 = negative attitudes.

23. How often do you come into contact with artificial intelligence in your daily life? *Several times a week, Several times a month, Several times a year, Less often, Never*

24. What does artificial intelligence mean?

Improvement of human intelligence through genetic modification.

A branch of art that combines scientific knowledge with artistic methods.

The development of computer systems that can perform tasks requiring human intelligence I don't know.

Dummy 0 = not knowing, 1 = knowing



Comissió de Bioètica

Baldiri i Reixac, 2 + 08028 Barcelona c

+34 934 035 463 cbub@ub.edu ub.edu/comissiobioetica

FAVOURABLE RESOLUTION

In its meeting of March 21th,2024, the Bioethics Commission of the University of Barcelona reviewed the methodology, ethical compliance and legal aspects of the TFM proposal detailed below.

Policy Acceptance and Sexual Orientation
Title of the TFM proposal
Andreas Halbig
Student
Dr.Aina Gallego
Supervisor
Dret – Unitat de Ciències Polítiques

Department

The commission reported on the revisions that needed to be made to approve the thesis proposal. Subsequently, the doctoral student submitted the revised documents, the documents were examined by the Technical Secretary of the commission and the commission granted its approval of the thesis proposal on April 02nd, 2024.

Barcelona, April 02nd, 2024

Vice-Rector for Research and Chair of the Bioethics Commission

Jordi García Fernández

Firmado por ***3005** JORDI GARCIA (R: ****8001*) el día 02/04/2024 con un certificado emitido por AC Representación

Institutional Review Board IRB00003099 CER042406

Figure A7. Favorable Resolution of the Ethics Committee of the University of Barcelona.

	Dependent variable:		
	Treatment		
Age	-0.003		
	(0.005)		
Men	-0.009		
	(0.128)		
Ideology	0.517		
	(0.419)		
Very Religious	0.142		
, ₀	(0.210)		
Rural	0.189		
	(0.182)		
Higher Secondary	-0.007		
	(0.161)		
CDU/CSU	-0.139		
	(0.236)		
Die Grünen	0.053		
	(0.277)		
Die Linke	0.254		
	(0.333)		
FDP	-0.002		
FDF	(0.275)		
No Anour			
No Answer	-0.221		
	(0.272)		
SPD	-0.220		
	(0.282)		
Vocational Training	-0.063		
	(0.144)		
Studied	-0.115		
	(0.145)		
East Germany	-0.120		
	(0.151)		
Constant	-0.027		
	(0.415)		
Pseudo R2	0.007		
Log likelihood	-750.431		
Log likelihood empty model	-755.464		
Likelihood ratio χ²	10.067		
Significance	0.816		
Number of observations	1090		
Observations	1,090		

Table A1. Randomization	Test. Logit Regression M	Model. Dependent Variable: Treatment.

Variable	Control	Treatment	LGB	AI negative	AI positive
Age	40.34	39.85	39.55	39.77	40.97
Men	0.54	0.54	0.53	0.52	0.57
Very Religious	0.29	0.3	0.3	0.31	0.27
Rural	0.46	0.48	0.47	0.47	0.47
Not born in Germany	0.06	0.08	0.07	0.08	0.06
East Germany	0.22	0.2	0.23	0.2	0.2
Ideology	0.44	0.45	0.47	0.44	0.42
Higher Secondary	0.73	0.72	0.72	0.72	0.73
Studied	0.55	0.53	0.53	0.51	0.58
Vocational Training	0.64	0.65	0.67	0.65	0.61
Attitudes to Homosexuals	0.21	0.24	0.24	0.23	0.2
Attitudes to AI	0.44	0.44	0.44	0.43	0.45
Knowledge Al	0.92	0.92	0.93	0.92	0.92
Knowledge Pride Flag	0.87	0.87	0.87	0.85	0.88
Support	3.08	3.08	3.24	3.05	2.95
Anger	0.25	0.26	0.28	0.25	0.25
Disgust	0.21	0.22	0.24	0.19	0.21
Worry	0.36	0.38	0.32	0.36	0.42
Enthusiasm	0.43	0.43	0.46	0.41	0.43
Optimism	0.47	0.47	0.51	0.44	0.48
Satisfaction	0.47	0.47	0.49	0.47	0.46

Table A2. Balance Check.

	Dep	Dependent variable: Support		
	Contact with LGBT	Rural	Attitudes to Homosexuals	
	(1)	(2)	(3)	
Freatment	-0.003	0.088	0.053	
	(0.122)	(0.087)	(0.071)	
Contact LGBT: never	-0.243 [*]	-0.146	-0.146	
	(0.143)	(0.108)	(0.108)	
Al negative	-0.071	-0.068	-0.068	
	(0.065)	(0.065)	(0.065)	
I positive	-0.144**	-0.149**	-0.149**	
	(0.065)	(0.065)	(0.065)	
1en	0.026	0.030	0.031	
	(0.058)	(0.058)	(0.058)	
\ge	-0.007***	-0.007***	-0.007***	
	(0.003)	(0.003)	(0.003)	
Rural	-0.055	-0.022	-0.054	
	(0.079)	(0.108)	(0.079)	
deology	-0.548***	-0.552***	-0.548***	
	(0.185)	(0.185)	(0.185)	

Working < 30h/week	-0.144	-0.146*	-0.146*
	(0.087)	(0.087)	(0.087)
Pupil, Student, Trainee	-0.199 [*]	-0.196*	-0.196*
	(0.107)	(0.107)	(0.107)
Contact AI_ rarely	0.152*	0.156*	0.155*
	(0.086)	(0.086)	(0.086)
Contact AI: never	0.396**	0.387**	0.391**
	(0.177)	(0.177)	(0.177)
Attitudes to Homosexuals	-0.245*	-0.242	-0.256
	(0.147)	(0.147)	(0.183)
Knowledge Al	-0.176 [*]	-0.182*	-0.182 [*]
	(0.106)	(0.106)	(0.106)
Disgust	-0.571***	-0.569***	-0.569***
	(0.168)	(0.168)	(0.168)
Worry	-0.679***	-0.673***	-0.674***
	(0.122)	(0.122)	(0.122)
Enthusiasm	1.011***	1.010***	1.010***
	(0.159)	(0.159)	(0.159)
Optimism	0.807***	0.790***	0.790***
	(0.177)	(0.176)	(0.176)
Satisfaction	1.126***	1.133***	1.134***
	(0.179)	(0.178)	(0.178)
Treatment x Contact LGBT:	0.131		
Often	(0.163)		
Treatment x Contact LGBT: Sometimes	0.103		
	(0.166)		
Treatment x Contact LGBT: Rarely	-0.054		
	(0.160)		
Treatment x Contact LGBT: Never	0.198		
The stars and as David	(0.191)	0.000	
Treatment x Rural		-0.062 (0.149)	
Treatment x Attitudes to Homosexuals		()	0.027
			(0.217)
Constant	2.852***	2.804***	2.813***
	(0.283)	(0.277)	(0.278)
Root Mean Squared Error	0.816	0.817	0.817
Observations	1,078	1,078	1,078
R ²	0.593	0.592	0.592
Note:			*p<0.1; **p<0.05; ***p<0.01

Note:

*p<0.1; **p<0.05; ***p<0.01

References

- Aarøe, L., Petersen, M. B., & Arceneaux, K. (2017). The behavioral immune system shapes political intuitions: Why and how individual differences in disgust sensitivity underlie opposition to immigration. *American Political Science Review*, *111*(2), 277-294.
- Abou-Chadi, T., & Finnigan, R. (2019). Rights for same-sex couples and public attitudes toward gays and lesbians in Europe. *Comparative Political Studies*, *52*(6), 868-895.
- Arceneaux, K. (2008). Can partisan cues diminish democratic accountability?. *Political Behavior*, *30*, 139-160.
- Atkinson, M. L., & Windett, J. H. (2019). Gender stereotypes and the policy priorities of women in Congress. *Political Behavior*, *41*, 769-789.
- Badgett, M. L., Carpenter, C. S., & Sansone, D. (2021). LGBTQ economics. *Journal of Economic Perspectives*, *35*(2), 141-170.
- Banks, A. J., & Valentino, N. A. (2012). Emotional substrates of white racial attitudes. *American Journal of Political Science*, *56*(2), 286-297.
- Barrantes, R. J., & Eaton, A. A. (2018). Sexual orientation and leadership suitability: How being a gay man affects perceptions of fit in gender-stereotyped positions. *Sex Roles*, *79*, 549-564.
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., & Topalova, P. (2009). Powerful women: does exposure reduce bias?. *The Quarterly Journal of Economics*, *124*(4), 1497-1540.
- Besco, R., & Matthews, J. S. (2023). Racial spillover in political attitudes: Generalizing to a new leader and context. *Political Behavior*, *45*(4), 1531–1551.
- Besley, T., & Case, A. (2003). Political institutions and policy choices: Evidence from the United States. *Journal of Economic Literature*, *41*(1), 7–73.
- Bracic, A., Israel-Trummel, M., Johnson, T., & Tipler, K. (2023). "Because He Is Gay": How Race, Gender, and Sexuality Shape Perceptions of Judicial Fairness. *The Journal of Politics*, *85*(4), 1167-1181.
- Brader, T., De Sio, L., Paparo, A., & Tucker, J. A. (2020). "Where You Lead, I Will Follow": Partisan Cueing on High-Salience Issues in a Turbulent Multiparty System. *Political Psychology*, *41*(4), 795-812.
- Bundesregierung. (2022). Queer leben: Aktionsplan der Bundesregierung für Akzeptanz und Schutz sexueller und geschlechtlicher Vielfalt. Bundesministerium für Familie, Senioren, Frauen und Jugend. Bundesministerium für Familie, Senioren, Frauen und Jugend. https://www.bmfsfj.de/resource/blob/205126/4826d1e00dc9d02e48f46fa47bb0c3e9/aktions-plan-queer-leben-data.pdf.
- Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., & Padró i Miquel, G. (2015). The value of democracy: evidence from road building in Kenya. *American Economic Review*, 105(6), 1817-1851.
- Chattopadhyay, R., & Duflo, E. (2004). Women as policy makers: Evidence from a randomized policy experiment in India. *Econometrica*, 72(5), 1409-1443.
- Cohen, R. (2024, January 9). France Gets Its Youngest and First Openly Gay Prime Minister. The New York Times. https://www.nytimes.com/2024/01/09/world/europe/gabriel-attalfrance-prime-minister.html.
- Craig, M. A., & Richeson, J. A. (2014). Not in my backyard! Authoritarianism, social dominance orientation, and support for strict immigration policies at home and abroad. *Political Psychology*, *35*(3), 417-429.
- Dpa. (2021, May 21). Dresden: Lebenslang für tödliche Messerattacke auf schwules Paar. Zeit Online. https://www.zeit.de/news/2021-05/21/hoechststrafe-fuer-toedliche-messerattacke-von-dresden.
- Drydakis, N. (2022). Sexual orientation discrimination in the labor market against gay men. *Review of Economics of the Household*, *20*(3), 1027-1058.

Drydakis, N. (2015). Sexual orientation discrimination in the United Kingdom's labour market: A field experiment. *Human Relations*, *68*(11), 1769-1796.

Egan, P. J. (2020). Identity as dependent variable: How Americans shift their identities to align with their politics. *American Journal of Political Science*, *64*(3), 699-716.

Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (2023). Queerfeindliche Hasskriminalität und Gewalt besser bekämpfen, https://www.bmfsfj.de/bmfsfj/aktuelles/alle-meldungen/queerfeindliche-hasskriminalitaet-und-gewalt-besser-bekaempfen-227188.

Fournier, P., Soroka, S., & Nir, L. (2020). Negativity biases and political ideology: A comparative test across 17 countries. *American Political Science Review*, *114*(3), 775-791.

Franck, R., & Rainer, I. (2012). Does the leader's ethnicity matter? Ethnic favoritism, education, and health in sub-Saharan Africa. *American Political Science Review*, *106*(2), 294-325.

Fujiwara, T., Müller, K., & Schwarz, C. (2023). The effect of social media on elections: Evidence from the united states. *Journal of the European Economic Association*, jvad058.

Gaikwad, N., Genovese, F., & Tingley, D. (2022). Creating climate coalitions: mass preferences for compensating vulnerability in the world's two largest democracies. *American Political Science Review*, *116*(4), 1165-1183.

Gallego, A., & Kurer, T. (2022). Automation, digitalization, and artificial intelligence in the workplace: implications for political behavior. *Annual Review of Political Science*, *25*, 463-484.

Goren, P., Federico, C. M., & Kittilson, M. C. (2009). Source cues, partisan identities, and political value expression. *American Journal of Political Science*, *53*(4), 805-820.

Grahn, M. (2023). Still proud at the polls? LGBT+ rights don't dilute the sexuality turnout gap. *European Journal of Political Research*.

Grzymala-Busse, A. (2012). Why comparative politics should take religion (more) seriously. *Annual Review of Political Science*, *15*, 421-442.

Harding, L. (2005, October 10). Merkel becomes Germany's first woman chancellor. The Guardian. https://www.theguardian.com/world/2005/oct/11/germany.topstories3.

HelloDavidPradoPerucha. (2024). Handsome businessman looking at camera. Freepik. https://www.freepik.com/free-photo/handsome-businessman-looking-camera_28006828.htm#fromView=search&page=1&position=1&uuid=87c507ed-4457-447ca870-e3a1a0ce2cb9.

Imai, K., Tingley, D., & Yamamoto, T. (2013). Experimental designs for identifying causal mechanisms. Journal of the Royal Statistical Society Series A: Statistics in Society, 176(1), 5-51.

Kite, M. E., & Deaux, K. (1987). Gender belief systems: Homosexuality and the implicit inversion theory. *Psychology of Women Quarterly*, *11*(1), 83-96.

Krzywdzinski, M., Gerst, D., & Butollo, F. (2023). Promoting human-centred AI in the workplace. Trade unions and their strategies for regulating the use of AI in Germany. *Transfer: European Review of Labour and Research*, *29*(1), 53-70.

Lammers, J., Gordijn, E. H., & Otten, S. (2009). Iron ladies, men of steel: The effects of gender stereotyping on the perception of male and female candidates are moderated by prototypicality. *European journal of social psychology*, *39*(2), 186-195.

MacAskill, E., Goldenberg, S., & Tran, M. (2008, November 5). Barack Obama to be America's first black president. The Guardian. https://www.theguardian.com/world/2008/nov/05/uselections20083.

Mackenzie-Liu, M., Schwegman, D. J., & Lopoo, L. M. (2021). Do foster care agencies discriminate against gay couples? Evidence from a correspondence study. Journal of Policy Analysis and Management, 40(4), 1140-1170.

Magni, G., & Reynolds, A. (2021). Voter preferences and the political underrepresentation of minority groups: Lesbian, gay, and transgender candidates in advanced democracies. *The Journal of Politics*, *83*(4), 1199-1215.

- Malik, M. H., Iqbal, S., Noman, M., Sarfraz, Z., Sarfraz, A., & Mustafa, S. (2023). Mental health disparities among homosexual men and minorities: A systematic review. *American Journal of Men's Health*, 17(3), 15579883231176646.
- Marcus, G. E. (2000). Emotions in politics. Annual Review of Political Science, 3(1), 221-250.
- Mintz, A., Valentino, N. A., & Wayne, C. (2022). Beyond rationality: Behavioral political science in the 21st century. Cambridge University Press.
- Mondak, J. J. (1993). Source cues and policy approval: The cognitive dynamics of public support for the Reagan agenda. *American Journal of Political Science*, 186-212.
- Parrott, D. J., & Peterson, J. L. (2008). What motivates hate crimes based on sexual orientation? Mediating effects of anger on antigay aggression. *Aggressive Behavior: Official Journal* of the International Society for Research on Aggression, 34(3), 306-318.
- Pew Research Center (2023). Same-Sex Marriage Around the World. https://www.pewre-search.org/religion/fact-sheet/gay-marriage-around-the-world/.
- Peyton, K. (2020). Does trust in government increase support for redistribution? Evidence from randomized survey experiments. *American Political Science Review*, *114*(2), 596-602.
- Ray, T. N., & Parkhill, M. R. (2021). Heteronormativity, disgust sensitivity, and hostile attitudes toward gay men: Potential mechanisms to maintain social hierarchies. *Sex Roles*, *84*(1), 49-60.
- Rodriguez-Sanchez, C., Schuitema, G., Claudy, M., & Sancho-Esper, F. (2018). How trust and emotions influence policy acceptance: The case of the Irish water charges. British Journal of Social Psychology, 57(3), 610-629.
- Sansone, D. (2019). Pink work: Same-sex marriage, employment, and discrimination. *Journal of Public Economics*, *180*, 104086.
- Schwarz, S., & Coppock, A. (2022). What have we learned about gender from candidate choice experiments? A meta-analysis of sixty-seven factorial survey experiments. *The Journal of Politics*, *84*(2), 655-668.
- Small, D. A., & Lerner, J. S. (2008). Emotional policy: Personal sadness and anger shape judgments about a welfare case. *Political Psychology*, *29*(2), 149-168.
- Statistisches Bundesamt (Destatis). (2024a, June 14). Bevölkerungsstand: Deutschland, Stichtag, Gebietsstand. Statistisches Bundesamt. https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsstand/Tabellen/bevoelkerungsstand-gebietsstand-werte.html.
- Statistisches Bundesamt. (2024b). Internetnutzung von Personen 2023 nach Altersgruppen in %. https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/_Grafik/_Interaktiv/it-nutzung-alter.html.
- Tesler, M. (2012). The spillover of racialization into health care: How President Obama polarized public opinion by racial attitudes and race. American Journal of Political Science, 56(3), 690–704.
- Thoma, B. C., Eckstrand, K. L., Montano, G. T., Rezeppa, T. L., & Marshal, M. P. (2021). Gender nonconformity and minority stress among lesbian, gay, and bisexual individuals: A metaanalytic review. *Perspectives on Psychological Science*, *16*(6), 1165-1183.
- Turnbull-Dugarte, S. J., & Ortega, A. L. (2023). Instrumentally inclusive: the political psychology of homonationalism. American Political Science Review, 1-19.
- Turnbull-Dugarte, S. J. (2020). The European lavender vote: Sexuality, ideology and vote choice in Western Europe. *European Journal of Political Research*, 59(3), 517-537.
- Turnbull-Dugarte, S. J. (2024). Far from the (Conservative) tree? Sexuality and intergenerational partisan preferences. Journal of European Public Policy, 1-29.

- Van Leeuwen, F., Inbar, Y., Petersen, M. B., Aarøe, L., Barclay, P., Barlow, F. K., ... & Tybur, J. M. (2023). Disgust sensitivity relates to attitudes toward gay men and lesbian women across 31 nations. *Group Processes & Intergroup Relations*, 26(3), 629-651.
- Weaver, V. M. (2012). The electoral consequences of skin color: The "hidden" side of race in politics. *Political Behavior*, *34*, 159-192.
- Wulf, V. (2023, February 13). Angriff bei CSD Münster: Prozess um den Tod von Transmann Malte C. Süddeutsche Zeitung. https://www.sueddeutsche.de/panorama/csd-muenstermalte-c-transmann-prozess-beginn-queerfeindlichkeit-1.5749795?reduced=true.
- Zhuravskaya, E., Petrova, M., & Enikolopov, R. (2020). Political effects of the internet and social media. *Annual review of economics*, *12*, 415-438.