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# Impact of Prison Experience on Anti-gay Sentiments: Longitudinal Analysis of Inmates and Their Families

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DISCUSSION PAPER SERIES

# Impact of Prison Experience on Anti-gay Sentiments: Longitudinal Analysis of Inmates and Their Families

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# ABSTRACT

# Impact of Prison Experience on Anti-gay Sentiments: Longitudinal Analysis of Inmates and Their Families*

Inmates' informal code often ascribes low status to persons perceived as passive homosexuals. We use longitudinal data to investigate whether prison experience contributes to anti-gay beliefs. We find that prison experience prompts a higher level of anti-gay sentiments among males and their families, while no discernible difference exists before incarceration. We find no effect for female ex-prisoners. We confirm that the results are not driven by pre-incarceration trends, changes in trust and social capital, socioeconomic status, mental health, masculinity norms, and other potential alternative explanations. Our study sheds light on the overlooked role of prisons as a significant contributor to the propagation of anti-gay attitudes.

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# 1  Introduction

Where do norms and values come from? Scholars have suggested multiple explanations, including religion (Becker and Pascali, 2019; Bergeron, 2020; Henrich, 2020), environment (Giuliano and Nunn, 2021), as well as many others. The norms and values are also shaped by organizations people participate in. In 1988, psychologist Edgar Schein defined organizational socialization as "the process by which a new member learns the value system, norms, and required behavior patterns of the society, organization, or group." One such organization that might influence norms and values is prison. According to the French philosopher's Michel Foucault treatise "Discipline and Punish," in prisons, "power relations and societal hierarchies are intensified and perpetuated" (Foucault, 1975). In this view, prison is shaped by society but also creates its own norms and values that are transmitted to individuals.

Social scientists who studied prisons have long argued that one of the norms that define prison socialization is homophobia. In prison, an informal hierarchy emerges, in which persons perceived as "passive" homosexuals occupy its lowest level (Clemmer, 1940; Sykes, 1958; Sykes and Messinger, 1960; Einat and Einat, 2000; Mironova, 2023). While this fact has already been established and documented in a variety of countries, the question remains: do people who exit prisons and return to society beyond bars continue to be influenced by the norms they were socialized in prison? This question is critical for understanding the impact of prisons on social and economic life.

One of the main challenges in the study of this issue is that the longitudinal survey data that tracks the incarceration status of individuals, as well as their attitudes towards gay persons, is scarce. In this paper, we investigate empirically whether prisons influence individual anti-gay beliefs. We use longitudinal data from Australia in an event-study design to show that (i) males who go to prison became more intolerant toward homosexual individuals, and (ii) that the intolerance further spreads to the members of their households.

In particular, we use the Household, Income, and Labour Dynamics in Australia (hereafter, HILDA) survey to explore whether people who return from prison end up with a higher level of anti-gay attitudes than before incarceration. This longitudinal survey has been conducted every year since 2001, and it allows us to use within-person variation from a non-trivial number of individuals who were incarcerated during this period. It also allows testing if the family members of incarcerated individuals change their attitudes towards gay

persons. The survey is rich enough to allow controlling for age-, cohort-, and time-specific trends in a variety of socio-demographic and heritage characteristics as well as testing for pre-incarceration differences in anti-gay attitudes.

We find that incarceration decreases male respondents' level of acceptance of gay persons having equal rights by a 0.28-standard-deviation. At the same time, the effect on female ex-prisoners is smaller in magnitude and insignificant. We also document the spread of the attitudes to the family members: having a close-family member returning from prison decreases the approval of equal rights for gay people by a 0.14-standard-deviation. Our results also (a) hold if we use the number of years in prison or the number of incarcerations, (b) are robust to the usage of alternative difference-in-differences estimates, (c) and are not driven by a particular subgroup of the population (age, education, religion, or state of residency), possible social desirability bias in the survey, or other types of measurement errors. Additionally, our results hold if, instead of within-person variation, we use between-person variation in propensity score matching estimation.

We find that our results are consistent with the influence of prison experience on homophobia specifically and not consistent with (i) pre-trends in homophobic attitudes, (ii) changes in attitudes toward women, (iii) changes in distrust toward out-groups, (iv) decline in social capital, (v) deterioration of mental health, or (vi) men changing their sexual orientation in prisons.

Our study makes several contributions. Most immediately, we contribute to the quantitative studies on the determinants of homophobia. This is an important question since discrimination against LGBTQ+ persons is still present in many parts of the world (Valfort et al., 2020) and is consequential for labor market participation (both on supply (Sansone, 2019) and demand side (Aksoy, Carpenter and Sansone, 2024)), wage gap (Aksoy et al., 2019), contributes to inequality in healthcare services (Saxby, Sonja and Petrie, 2020), and limits pro-social behavior (Aksoy, Chadd and Koh, 2023).[1] Studies in this literature have identified several factors contributing to the anti-gay norms: historical bias in sex ratios (Baranov, De Haas and Grosjean, 2018; Brodeur and Haddad, 2021), historical religious missions (Ananyev and Poyker, 2021), modern Renewalist Christian denominations (Grossman, 2015), lack of legal recognition of same-sex marriage (Aksoy et al., 2020), and AIDS

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[1]See Badgett, Carpenter and Sansone (2021) for a systematic review of studies on wage disparities and labor market discrimination of LGBTQ+ persons.

epidemic and scapegoating of LGBTQ+ persons (Fernández, Parsa and Viarengo, 2019). We propose a new potential source of homophobic attitudes — prisons and penitentiary policies — and offer several quantitative tests for this hypothesis. Our paper complements findings of Ananyev and Poyker (2024), which demonstrate the dissemination of prison norms, including homophobia, in the aftermath of the Soviet amnesty of 1953, wherein 1.3 million prisoners were released following Stalin's death. While their research highlights the nationwide horizontal spread of cultural norms, our paper focuses on the impact of prison experience using individual longitudinal data. We specifically examine the transmission of homophobia within households.

Additionally, we contribute to the literature on the effects of prisons on the convicted individuals (Pager, 2003; Kling, 2006; Agan and Starr, 2018 on employment, Mueller-Smith, 2015; Dobbie, Goldin and Yang, 2018 on employment and recidivism, Aizer and Doyle Jr, 2015 on high school completion, Hjalmarsson and Lindquist, 2022 on health) as well as on their household members (Dobbie et al., 2018; Norris, Pecenco and Weaver, 2021 on outcomes of their children) and the larger society (Rose and Shem-Tov, 2019 on crime rates). Here we show the effect of incarceration on changes in the norms and beliefs of prisoners, their families, and larger societies, both in the short-run and in the long-run.

## 2 Background

### 2.1 Homophobia and Prison Experience

The most obvious mechanism of the influence of prison experience on homophobia is prison norms and inmate code. As Dolovich (2012) documents for the U.S. prisons, a set of norms emerge that privilege competition for status and power in an informal hierarchy. Such norms have been also documented in the Soviet underworld (Galeotti, 2018). In such environments, qualities that are stereotyped as "feminine" are despised, and "passive" homosexuals are perceived as woman-like. It has also been documented that in many cases, homosexual acts involve violence and coercion According to Trammell (2011), homosexual relationships between men can sometimes be described as a "protective pairing," where a "husband" provides protection to a "weak" and "vulnerable wife." According to Kupers (2017), the prison code of U.S. prisons mandates that "male/female binary division is absolute," and those who challenge it, "the non-tough man, the gay man, the trans person —

will be attacked, and likely raped." Thus, a person who goes through a prison experience arguably can be socialized into ascribing low status to "passive" homosexuals and expressing anti-gay attitudes later on. Anti-gay norms have also been documented in many sociological studies in male prisons around the world: in Australia, Israel, Russia, United States, and other countries (Clemmer, 1940; Sykes, 1958; Sykes and Messinger, 1960; Einat and Einat, 2000). More broadly, homophobia has been connected to the authority of sex-segregated institutions (Britton, 1990).

It is important to note that masculinity norms are not creating homophobia in prisons. Masculinity norms have been shown to proliferate in the contexts of intense male-to-male competition for status and scarce resources (Baranov, De Haas and Grosjean, 2018). While prisons may be viewed as settings where such competition can take place, the distinctive characteristics of male prisons, such as their regimented lifestyle and the absence of women, do not contribute to the set of norms associated with hegemonic masculinity. Most notably, the inmate code is primarily concerned with regulating differences in behaviors *between* different strata of men rather than prescribing the appropriate male conduct.[2] For example, the explicit goal of the inmate code is to limit violence and risk-taking by inmates within the followers of the code. The punishment for transgressions is often denigration to the lowest status equal to that of "passive" homosexuals (Mironova, 2023).

To demonstrate suggestive evidence that mass incarceration might be linked to homosexual attitudes, in Figure 1, we show a residual plot from a cross-country regression between the incarceration rates per capita from World Prison Brief and the respondents' evaluation of how welcoming their locations are for gay and lesbian individuals from Gallup World Poll data. We find that in the countries with higher incarceration rates, Gallup respondents are more likely to say that their locations are "not a good place" for gay persons: a 100-percent increase in incarceration rate per capita is associated with a 10-percentage-points increase in homophobia or its 0.37-standard-deviation. While such a graph, presented here for illustrative purposes, can suffer from a number of sources of endogeneity (such as economic development, history, and other aspects of culture), in the following sections we present a set of tests that arguably permit more definitive causal conclusions.

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[2]According to Mahalik et al. (2003), masculinity norms are comprised of violence, winning, risk-taking, emotional control, playboyism, primacy of work, disdain towards homosexual individuals, dominance, self-reliance, pursuit of status, and self-reliance. Out of these norms, the inmate code does prescribe disdain towards homosexuals. As for the other norms, it is either silent or dictates the opposite. The code also does not prescribe which beliefs inmates must hold regarding the appropriate role of women in society.

**Figure 1** – Countries With Larger Prison Population Are More Homophobic
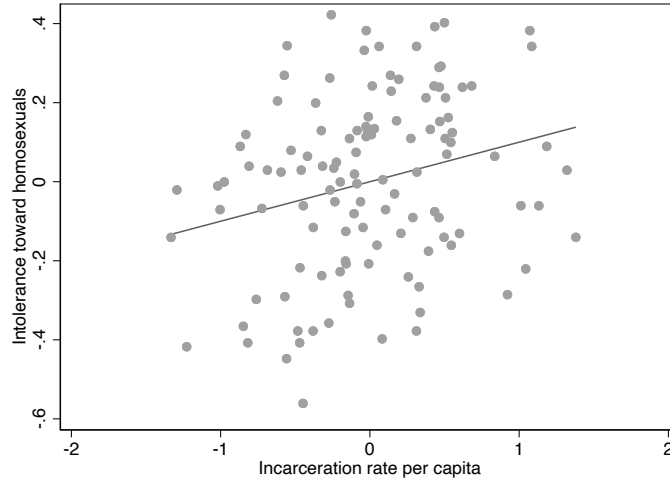


*Notes*: This Figure shows a residual plot from the country-level regression of incarceration per capita on intolerance toward homosexuals. The regression coefficient is 0.100, robust standard errors are 0.035, and the p-value is 0.005. The prison population in 2019 is from World Prison Brief (accessible at `PrisonStudies.org`). Intolerance toward homosexuals is from the 2019 Gallup World Poll. The question used in the Gallup survey is as follows: "Is the city or area where you live a good place or not a good place to live for gay or lesbian people?" The variable is constructed as the share of people that answered "Not a good place." Australia is on the linear fit line in the center.

## 2.2 Attitudes towards Homosexuality in Australia

The main reason for looking at Australia is the availability of high-quality longitudinal survey data on attitudes toward gay marriage as well as the respondent's incarceration status. With these survey data, we can observe if people who get into prisons end up less supportive of marriage equality for gay persons. To the best of our knowledge, the survey data that trace peoples' attitudes towards homosexual individuals along with their incarceration experience are not available anywhere else.

As Australia traces its statehood to England's penal colony established in 1788, its legislation regarding homosexuality mirrored those of England as homosexual men were prosecuted under the "anti-buggery" laws. After World War II, homosexuality was largely viewed by politicians and the public as a moral failure (Wotherspoon, 1989). After the end of the Cold War, the opinion started to shift with the process culminating in the legalization of the right to marry for homosexual couples in December 2017. This legislation followed the

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nationwide postal survey on the matter where 61.6 percent of Australians voted in favor of the legalization of same-sex marriage.

Fear of being labeled a homosexual is an important part of Australian prison culture (Richmond, 1978) as well as non-consensual male-to-male sexual intercourse and intercourse for protection (Richters et al., 2012). Given this evidence, we expect that people who are exposed to prison culture might end up less supportive of marriage equality for gay couples. It should be noted, however, that the incarceration rate in Australia is only 0.2 percent of the population. Thus it is reasonable to expect that such norms would spread only to the immediate family members but are unlikely to influence society at large.

## 3   Data

To investigate the impact of prisons on incarcerated individuals, we use the Australian Household, Income, and Labour Dynamics in Australia (HILDA) survey. It offers a nationally representative sample of individuals that it has followed since 2001. Overall, HILDA data cover 32,729 respondents from 2001 to 2019 who appeared at least twice in the survey. Our primary reason for using this survey is that unlike other longitudinal surveys from other countries (such as RLMS in Russia, GSOEP in Germany, and BHPS in the UK) it offers questions on whether the respondent had been incarcerated (as well as the respondent's family members), and also the question about the attitudes towards homosexual individuals. Thus it allows us to observe the LGBTQ+ related attitudes before and after incarceration.

The question that we use for the measure of intolerance is as follows: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that homosexuals should have equal rights?" As a result, we use an ordinal variable varying from 1 to 7. We further normalize it to have zero mean and standard deviation of one for the sake of interpretation. The question was asked not in all years from 2001 to 2019; it was only asked in 2005, 2008, 2011, 2015, and 2019. Hence, in the baseline specification, we restrict our data to only these years.

The question about incarceration asks whether a person "was in prison/jail during the last year." We assume that being in prison is an absorbing state because that person already experienced prison life. Thus for each of the five periods, we create a dummy variable $\mathbb{1}(\text{Respondent was in prison})_{i,t}$ equal to 1 if the person has answered that he/she was in

prison in any year before year $t$ (including years for which we don't have data on gay attitudes). Similarly, we construct a dummy for individuals whose family members served a term in prison and returned.[3] Table A.1 provides summary statistics for HILDA data. See Appendix A for the information on the construction of other variables.

## 4   Empirical Specification and Results

### 4.1   Empirical Specification and Identification

We construct a panel dataset of individuals for the years: 2005, 2008, 2011, 2015, and 2019. We estimate the following equation:

$$\text{Equal rights}_{i,t} = \beta \cdot \mathbb{1}(\text{Respondent was in prison})_{i,t} + \mu_i + \lambda_{s,t} + \eta X_{i,t} + \varepsilon_{i,t}, \qquad (1)$$

where Equal rights$_{i,t}$ is the dependent variable measuring the level of support for homosexuals having equal rights by respondent $i$ in year $t \in \{2005, 2008, 2011, 2015, 2019\}$. Because our main dependent variable is categorical and varies from 1 (strongly disagree) to 7 (strongly agree), for the sake of interpretability, we normalize it to have a mean of 0 and a standard deviation of 1. The variable $\mathbb{1}(\text{Respondent was in prison})_{i,t}$ is equal to 1 if the respondent was ever in prison before time $t$. Point-estimate $\widehat{\beta}$ measures the impact of being in prison on outcomes for the individual $i$ in year $t$, conditional on individual fixed-effects ($\mu_i$), state-specific time trends ($\lambda_{s,t}$), and individual controls ($X_{i,t}$) that include age-, cohort-, and time-specific trends in socio-economic and demographic characteristics. We cluster our standard errors on the respondents' level.

Alternatively, we have an event study design. It allows us to see how respondents' anti-gay attitudes change over time after obtaining prison experience. Additionally, we can directly test for pre-trends in intolerance. Hence, we estimate the following equation:

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[3]In our data, 3% of men and 1% of women at some point were incarcerated and 5% of men and 7% of women at some point had a close family member incarcerated. Hence, the identifying variation comes only from these respondents. The rest (even if they don't contribute to the identifying variation in prison experience) provide us with more variation that can help us better capture age-, cohort-, and year-specific trends and fixed effects.

$$\text{Equal rights}_{i,t} = \underbrace{\sum_{l=-3}^{-1} \gamma_l \cdot \mathbb{1}(\text{Ever was in prison})_i \cdot \text{D}(w = l) +}_{\text{pre-prison period}}$$

$$\underbrace{+ \sum_{l=0}^{3} \gamma_l \cdot \mathbb{1}(\text{Ever was in prison})_i \cdot \text{D}(w = l) +}_{\text{post-prison period}} \tag{2}$$

$$+ \mu_i + \lambda_{s,t} + \eta X_{i,t} + \varepsilon_{i,t},$$

where Equal rights$_{i,t}$ is a measure of tolerance toward gay persons by respondent $i$ in year $t$. Period $w = 1$ is the first year when the respondent was asked about her/his attitudes toward gay persons after being in prison. Period indices run from $-3$ to $3$ and represent the position of periods relative to prison treatment before year $w = 1$. The variable $\mathbb{1}(\text{Ever was in prison})_i$ is a cross-sectional variable that is equal to 1 if respondent $i$ was ever incarcerated at some point in our dataset and zero otherwise. We interact it with the $\text{D}(w = l)$ — a dummy equal to one if year $w = l$. Periods from $l \in [-3; -1]$ represents pre-prison period and periods from $l \in [0; 3]$ represents post-prison period. Coefficients $\gamma_l$ with $l \geq 0$ capture the prison experience effect in the post-prison period, and the ones with $l < 0$ capture pre-trends.

## 4.2 Results

**Canonical DD** Table 1 shows the results of the estimation of Equation 1. Panel A estimates it for the sample of male respondents. In Column I, we only use respondent and year fixed effects. We show that being in prison is associated with a 0.23 standard deviation decrease in the respondent's support for equal rights for gay persons. In Columns II–VII, we sequentially add additional controls. In Column II, we control for state-year fixed effects to address possible changes in states' legislation and public goods provision. Column III adds religion-age and religion-cohort fixed effect to address a concern that people belonging to different religions may become more homophobic and more likely to be sent to prison over time as they age or their cohort ages. Column IV similarly controls for ethnicity-age and ethnicity-cohort fixed effects. In Column V we control for possible differential age and cohort trends in education. Column VI adds occupation-specific trends. In addition, to age- and cohort-specific trends, here we assume that certain occupations may become less profitable over time, thus causing people to commit crimes and be more intolerant of homosexual per-

sons. Hence, we also add occupation-year fixed effects to address possible economy-specific time trends in occupation. Finally, in Column VII, we control for lagged income to address possible changes in income that can make a person more likely to commit a crime and change his attitudes toward minorities. The coefficient estimate for the prison-experience dummy is not statistically different from the one in Column I: being in prison is associated with a 0.28-standard deviation decrease in the respondent's support of equal rights for gay persons.

**Table 1** – Effects of Prison Experience on Reductions in Tolerance Toward Homosexual Persons

|  | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
|  | Dependent variable: Homosexuals should have equal rights | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| 1(Respondent was in prison) | -0.230*** | -0.234*** | -0.301*** | -0.298*** | -0.292*** | -0.279*** | -0.279*** |
|  | (0.075) | (0.076) | (0.077) | (0.080) | (0.082) | (0.086) | (0.086) |
| R-squared | 0.751 | 0.751 | 0.763 | 0.768 | 0.775 | 0.803 | 0.804 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| *Panel B: Sample of women* | | | | | | | |
| 1(Respondent was in prison) | -0.147 | -0.145 | -0.115 | -0.136 | -0.153 | -0.129 | -0.129 |
|  | (0.104) | (0.104) | (0.107) | (0.110) | (0.112) | (0.126) | (0.126) |
| R-squared | 0.767 | 0.768 | 0.778 | 0.783 | 0.789 | 0.806 | 0.806 |
| Observations | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 |
| *Panel C: Sample of men* | | | | | | | |
| 1(Respondent's close family | -0.119** | -0.117** | -0.140*** | -0.136** | -0.141** | -0.135** | -0.135** |
| member was in prison) | (0.053) | (0.053) | (0.054) | (0.055) | (0.055) | (0.055) | (0.055) |
| R-squared | 0.764 | 0.764 | 0.770 | 0.775 | 0.779 | 0.792 | 0.792 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: The dependent variable is normalized (with a mean of 0 and a standard deviation of 1) degree of support for equal rights for gay persons (originally on a 1–7 scale). Panel A estimates Equation 1 on the sample of male respondents. Panel B estimates Equation 1 on the sample of female respondents. Panel C estimates Equation 1 on the sample of male respondents but uses a different explanatory variable — dummy whether the respondent's close family member ever was in prison. Ihs income is an inverse hyperbolic sine of the respondent's last financial year disposable regular income. All Columns include respondent and year fixed effects. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Panel B estimates Equation 1 on the sample of female respondents. The resulting coefficient is more than twice as small relative to the coefficient for the male respondents and is not significant across all Columns. This suggests, that the prison experience only affects the anti-gay sentiments of men while women released from prison do not become more in-

tolerant. This result is consistent with the prison-specific masculinity mechanism described in Section 2.

Panel C estimates Equation 1 on the sample of male respondents, but instead of the main explanatory variable $\mathbb{1}(\text{Respondent was in prison})_{i,t}$ we use variable $\mathbb{1}(\text{Respondent's close family member was in prison})_{i,t}$. It is equal to one if a close family member of a respondent $i$ was ever in prison before year $t$. We find, that men also become more anti-gay if their close family member returns from prison. Family members of ex-prisoners decrease their support for equal rights for gay persons by a 0.14-standard-deviation. This effect is exactly two times smaller than the direct effect on the males who experienced prison by themselves but is still statistically significant, consistently across all specifications. We hypothesize that this coefficient is smaller in magnitude than the one in Panel A for two reasons. First, it is not the effect of first-hand prison experience but rather a second-hand experience. Second, the coefficient may be attenuated because a returned-from-prison family member may be a woman. As we do not observe the gender of that family member, the inclusion of female ex-prisoners who do not contribute to the intolerance toward gay persons attenuates our coefficient. The effect of second-hand prison experience through close family members is driven exclusively by the subsample of men. Results are still significant (but smaller in magnitude) when we re-estimate Panel C on the full sample in Panel A of Table B.1; however, the effect disappears if we use only the sample of female respondents (Panel B of Table B.1).[4]

Results are substantively similar if instead of a dummy for whether the respondent was in prison, we use a cumulative number of times that the respondent was incarcerated or the total number of years that he/she spent there. See Tables B.2 and B.3. Because we do not observe longitudinal data on close family members who returned from prison we cannot compute the number of years that they spent in prison; hence we can't replicate Panel C in Table B.3. Results also hold if we use population weights in Table B.4.

While we start by presenting a canonical differences-in-differences OLS design, it is worth pointing out that those designs were shown to produce biased estimates in the presence of significant effect heterogeneity. To demonstrate the robustness of our results, we test the same hypothesis using a set of recent methods from the "new difference-in-differences" literature (Borusyak, Jaravel and Spiess, 2021; Callaway and Sant'Anna, 2021; Sun and Abraham,

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[4]Naturally, we would also like to check the effect of third-hand prison experience on people living around ex-prisoner. However, we do not have zip-codes of the respondents in our data and even if they were available we would have too few zip-codes with multiple respondents.

2021; De Chaisemartin and D'Haultfoeuille, 2022). Table B.5 contains results for these alternative methods. For the sample of males, all coefficients remain negative and significant, with the one computed using the methodology of De Chaisemartin and D'Haultfoeuille (2022) yielding the largest negative estimate $(-0.23)$ and the one computed using the methodology of Sun and Abraham (2021) yielding the smallest (and barely significant on 90% level) estimate $(-0.10)$. Panel B contains estimates for the sample of females. All of the coefficients are statistically insignificant and all but one — computed using the method of Borusyak, Jaravel and Spiess (2021) — are negative. Panel C contains results for the effect of ex-prisoners on their close family members. Methods by Borusyak, Jaravel and Spiess (2021), De Chaisemartin and D'Haultfoeuille (2022), and Sun and Abraham (2021) produce negative and significant coefficient (the largest in magnitude $-0.15$ by De Chaisemartin and D'Haultfoeuille, 2022). The estimate computed following Callaway and Sant'Anna (2021) is also negative $(-0.065)$ but is statistically insignificant.[5] Overall, we believe that our main results appear to be robust to the alternative ways of constructing differences-in-difference estimates and while the OLS estimate appears to be not the most conservative in its magnitude it is the most straightforward and we prefer to keep it as the baseline.

**Event-study design** Panel A of Figure 2 plots the resulting coefficients of Equation (2) estimated on the sample of males for the specification with the full set of controls (Table's 1 Column VII of Panel A).[6] Similarly, Panels B and C of Figure 2 plot results for the female respondents and for men whose close family member has returned from prison. The first noteworthy feature is that neither specification exhibits pre-trends. We fail to reject the joint F-test that the pre-event $\gamma_l$s are zero in all three Panels. This suggests that the exact timing of the incarceration is not related to trends in homophobia and that respondents did not start to become more homophobic before their first incarceration. The second noteworthy feature is that four point-estimates for periods after incarceration experience have a similar magnitude as the point estimate of $\widehat{\beta}$ from the baseline specification in Table 1. Thus the effect is constant across all years and our baseline specification (1) captures the full-time path of the effect. To conclude, all event-study results are qualitatively similar to those

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[5]Note that the method proposed in Callaway and Sant'Anna (2021) omits all individuals who have missing observations in the panel (i.e., only keeps those to have a balanced panel). This may reduce the sample and lead to larger standard errors.

[6]Period $w = -1$, i.e., the latest year when the question on the equal rights had been asked before the incarceration, is specified as the baseline period.

**Figure 2** – Event Study Analysis: No Increase in Intolerance Toward Gay Persons Before Year 0 and Large Increase Among Men Afterwards

## Panel A: Sample of Men



## Panel B: Sample of Women
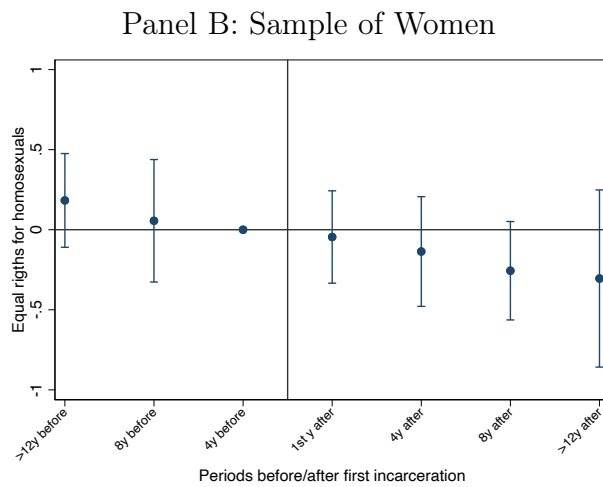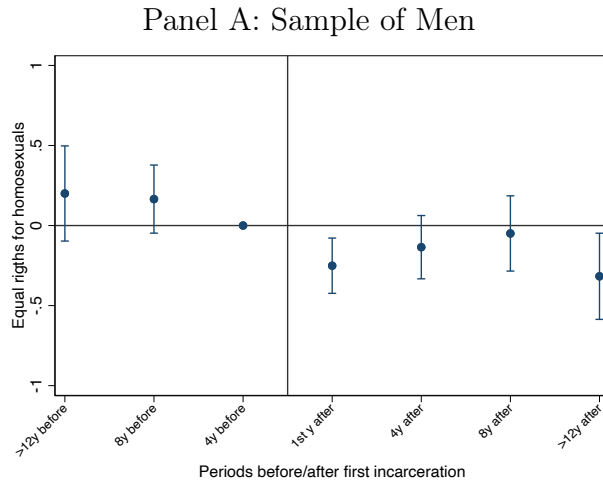


## Panel C: Close Family Member & Sample of Men
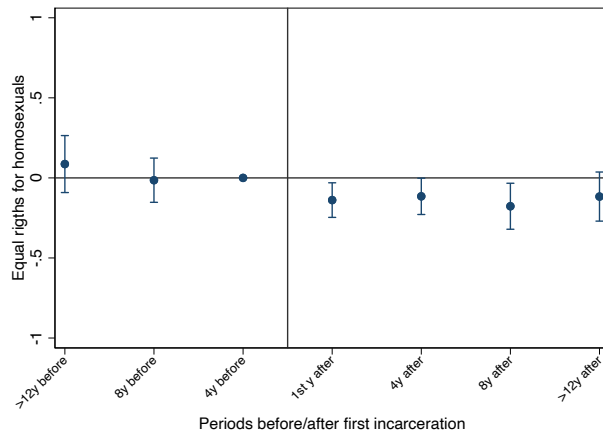


*Notes*: This Figure graphs the results of estimating Equation 2 for specification in Column VII of Table 1. Panel A is corresponding to the specification in Panel A of Table 1. Panel B is corresponding to the specification in Panel B of Table 1. Panel C is corresponding to the specification in Panel C of Table 1. Point estimates are reported in Appendix Table B.6. P-values for the joint significance of the pre-trend's coefficients are equal to 0.577 for Panel A, 0.471 for Panel B, and 0.718 for Panel C. This figure reports 95th-percent confidence bands. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

obtained in Table 1.

## 4.3 Additional Robustness Checks

**Measurement error** There are two possibilities for measurement error in the explanatory variable. The first one arises if a respondent was incarcerated and released before enlisting in the survey. For example, if an individual $j$ did not go to prison in 2001–2019 but was in prison in, e.g., 1998, then $j$'s $\mathbb{1}(\text{Respondent was in prison})_{j,t}$ will be always equal to zero and she won't contribute to the identification because of individual fixed effect and thus won't bias our results. However, if respondent $j$ is incarcerated again, she will be counted as switching from non-treated to the treated state while in reality she should be counted as always treated (and not contributing to the identifying variation). Such measurement error will work against us finding the effect of prison culture on intolerance toward gay persons among *men*, but at the same will help us to find zero effect among *women*. To address this concern, in Table B.7 we show that our baseline results hold on the sample of respondents who entered the survey at the age of 18 or younger.[7] Here, we assume that 16–18 years old had no time to go to prison yet.[8] Additionally, Figure B.1 shows that our results are not driven by a particular subsample of respondents' age-of-survey-entry. Dropping respondents that joined the survey at 19–45, 46–60, or after 60 barely moves the coefficient of interest.

The second potential error in the explanatory variable arises if respondents choose to under-report that they were in prison. Such a situation will make it more difficult for us to find a negative effect on attitudes toward gay persons among male ex-prisoners and household members of ex-prisoners but less difficult to find zero effect for female ex-prisoners. However, we find that the shares of released prisoners (according to the Australian Statistical Service) are quite close to the shares that we got from the HILDA survey.[9] While it is impossible to make any reasonable statistical analysis here, eyeballing suggests that respondents are unlikely to hide their prison experience. If this measurement error in the

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[7]Because the number of individuals who entered the survey at the age of 18 or younger is small, adding a full set of age- and cohort-specific fixed effects from our preferred specification kills all the identifying variation. Hence, here we use the most parsimonious specification from Column I of Table 1.

[8]This assumption is likely to be true for the specifications with individual prison experience (Columns I–IV of Table B.7) than for specifications with second-hand prison experience (Columns V–VI) because a child can still be affected by returning from prison father/mother at any age. Nevertheless, it would be an attenuation bias working against us finding the negative effect.

[9]See www.abs.gov.au/statistics/people/crime-and-justice/prisoners-australia/latest-release#data-download.

explanatory variable is driven by social desirability bias, following Blair, Coppock and Moor (2020), we additionally control for an interviewer's fixed effects. Appendix Table B.8 shows that our results hold.

Another source of measurement error bias is a non-classical measurement error in the dependent variable that correlates with prior incarceration. E.g., due to some individual characteristics, a respondent may pretend to be more homophobic if he were in prison. However, this concern is addressed by individual fixed effects or age- and cohort-specific characteristic-specific fixed effects that we absorb in Columns III–VI of Table 1.[10]

Finally, another potential explanation is that individuals did have anti-gay attitudes before prison but chose to hide those when responding to the survey. Later, after prison, they stopped hiding their views and responded sincerely. We view such "mainstreaming" of homophobia as one of the potential mechanisms of the effect. As Bursztyn, Egorov and Fiorin (2020) show, individuals, when placed in an environment where the extreme views appear acceptable are more likely to express such views and also less likely to sanction individuals who espouse them. Of course, we will never know how sincere the support of HILDA's respondents for the rights of homosexuals before the prison, but, as we show in Panel C of Figure 2, their — potentially well-hidden anti-gay attitudes — failed to influence even their close family members before their incarceration.

**Alternative samples**   We probe the sensitivity of our results in several ways. First, we demonstrate that our results are not driven by any specific state. Panel A of Figure B.2 estimates the most conservative specification from Column VII of Table 1 Panel A dropping one state at a time. This may be potentially important because the Australian population is mainly concentrated in New South Wales (largest city Sydney) and Victoria (largest city Melbourne). The estimated coefficient always remains significantly different from zero. Dropping Queensland, decreases the coefficient the most, from -0.28 to -0.31. Dropping the Victoria, increases the coefficient the most, from -0.28 to -0.26. We perform the same exercise for Panels B and C of Table 1; these results are shown in Panels B and C of Figure B.2.

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[10]Alternatively, there may be a progressive trend such as people everywhere becoming more likely to be less homophobic. But because people who go to prison are less integrated into society, they may say what they think and not what society expects from them. In this case, we would have to find an effect of prison on homophobia among men when there is none. However, attitudes toward gay persons are not the only progressive issue that has been changing recently, and attitudes to women's rights mostly improving. However, we do not see the effect of prison on attitudes to women's rights (Table B.11), so this alternative explanation becomes less plausible.

All the results appear robust. Additionally, in Figures B.3 and Figures B.4, we show the robustness of our preferred estimate to dropping one religion or education group at a time.

**Matching** In this section, we relied on the identification from within-person variation in prison experience. This identification strategy uses only variation among respondents who switched their prison experience status to identify the coefficient of interest. In our data, only 3% of men and 1% of women were incarcerated.[11] To show that our results are not driven by very little variation we show that they are robust to using an alternative identification strategy based on matching on observable characteristics (i.e., using between-person variation). Luckily, HILDA contains a very comprehensive questionnaire. Following the approach proposed in Belloni, Chernozhukov and Hansen (2014), we choose a set of controls to estimate the propensity score.[12] Table B.9 contains the results for different types of matching estimators. Reassuringly, these matching estimates are substantively similar to our baseline results. In sum, while both of these results are based on different identifying assumptions and use a different identifying variation, the fact that they yield similar estimates (even in magnitude) suggests that our results are not an accidental artifact of the number of individuals going to prison being low.

## 4.4 Alternative Explanations

**Pre-trends in incarceration** Within-person variation and a rich set of controls allow us to address the most likely source of unobserved trends that can possibly correlate with the higher probability of ending up in prison and developing anti-gay attitudes. The biggest concern that can invalidate our result is that anti-gay persons are just more likely to be criminals and end up incarcerated. While we show the absence of pre-trends in homophobia using the event-study specification in Equation 2, we can additionally address this alternative explanation by estimating the following specification that uses (i) all years in which the question about incarceration was asked and (ii) using a dummy for being in prison *last* year

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[11]Respondents that did not switch their prison status contribute to the estimation of the age- and cohort-specific fixed effects.

[12]In this double-robust matching procedure we run lasso on the outcome and treatment variable using the full set of variables available at HILDA. Then we choose a set of variables, that are significant correlates of both, and run a propensity score using that set of overlapping variables.

instead of *ever* being in prison. We estimate the following specification:

$$\mathbb{1}(\text{Was incarcerated last year})_{i,t} = \beta \cdot \text{Equal rights}_{i,t-1} + \mu_i + \lambda_{s,t} + \eta X_{i,t} + \epsilon_{i,t}. \quad (3)$$

Because the question on whether the respondent was in prison last year was asked every year, in comparison to the specification in Equation 1, here we use all years from 2006 (when the first question about attitudes toward gay persons was asked) until 2019. Here, our dependent variable $\mathbb{1}(\text{Was incarcerated last year})_{i,t}$ is equal to 1 if respondent $i$ was incarcerated within a year prior to year $t$. The main explanatory variable Equal rights$_{i,t-1}$ measures respondent's $i$ attitudes toward gay rights in the previously available period (i.e., the first available period before the incarceration). Thus for the periods 2005–2008, it is measured as respondent's gay rights attitude in the year 2005, for the period 2008–2011 — in 2008, for 2011–2015 — in 2011, and for 2015–2019 — in 2015. Essentially, this specification estimates how an individual's homophobia at period $t-1$ affects the probability of the respondent being sent to prison at period $t$.

Table B.10 presents the results. We find that men (Panel A) and women (Panel B) with anti-gay sentiments are not more likely to be incarcerated. Similarly, anti-gay respondents are not more likely to have a family member incarcerated (Panel C). Together with the absence of significant pre-trends in Figure 2, these results are reassuring of the absence of selection of homophobic trends in people admitted to prisons (conditional on individual fixed effects).

**Masculinity norms and attitudes toward women**   The literature on masculinity norms (among others, Grosjean and Khattar, 2019; Teso, 2019; Brodeur and Haddad, 2021; Bazzi et al., 2022) suggests, that a high concentration of men in a community may lead to changes in norms related to attitudes to women, risk, and even health practices (e.g., rectal prostate exam). Thus the observed effect can be explained by masculinity as prisons have 100% biased sex ratios. To address this concern, in Table B.11 we replicate Column VII of Table 1 on the sample of men and women with three outcomes related to attitudes toward women that could be affected by the biased sex ratios and available in HILDA. Columns I and II show results for the effect of prison experience on males' and females' attitudes toward women, defined as a standardized ordinal variable for a respondent thinking that "whatever career a woman

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may have, her most important role in life is still being a mother." The coefficient of interest is insignificant in both Columns. We observe similar insignificant results in Columns III–VI, where we use alternative variables for attitudes toward women: "it is better for everyone involved if the man earns the money and the women stay home" and "it is not good for a relationship if the woman earns more than the man." These results suggest, that prison experience only affects norms formalized by the prison code but does not have effects on other cultural norms even in the case of extremely biased sex ratios.

**Trust toward out-groups and social capital**   Our results may be also driven by an overall decline in male prisoners' social capital and trust toward out-group members during their prison term. Hence, using available questions from HILDA we construct two measures of social capital (hours per week that the respondent spends on volunteer/charity work and a measure of whether people in the respondent's neighborhood can be trusted) and one measure of trust toward out-group members (a measure of whether generally speaking, most people can be trusted). We show these results in Table B.12, where we replicate Column VII of Table 1 on the sample of men and women with three aforementioned measures as dependent variables. However, we find no significant effect of prison experience on these variables, suggesting that our results are not driven by the deterioration of social capital.[13] Overall, we do not see that prison experience decreases social capital and trust toward out-groups.

**Mental health**   Another plausible alternative mechanism might be decreasing mental health: prison experience and related changes lead to distress and mental health issues (Armour, 2012). As a result, it might make people less accepting of gay rights. To test these explanations we analyze the following mental stress outcomes recorded in HILDA: experience of nervousness, calmness, and peacefulness, "feeling down," experiencing depression, and Kessler psychological distress scale (Andrews and Slade, 2001). First, in Table B.13 we show that mental health does not correlate with attitudes toward gays in a sample of men in Panel A and only one measure out of six suggests a correlation in a sample of women in Panel B (for whom we find no effect of prison experience on homophobia). Second, Table B.14

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[13]Results in Columns I and II for the number of hours respondent spends for volunteer/charity work need to be taken cautiously as there is little identifying variation; it appears that people who go to prison are rarely doing any charity work. Nevertheless, we report these results because we want to use all applicable variables from HILDA to test alternative hypotheses.

shows that even if we control for these six measures of mental health, they do not explain away our results. Thus, our results are unlikely to be mediated by mental health.

**Change in sexual orientation** Fleisher and Krienert (2009) suggested a brave theory that men who go to prison and experience sex with other men acquire homosexual orientation.[14] First, even if it can apply to some individuals, it suggests that prison experience should *increase* support for equal rights. We show that it decreases the support — thus such a process (even if it takes place) works against us finding a negative effect. Second, we show empirically that the prison experience does not change a person's sexual orientation. To demonstrate this, we use the question, of whether respondents identify themselves as gay to define a dummy equal to one if they identify themselves as LGBTQ+ and zero if identify themselves as a straight woman or man. Table B.15 shows results for the effect of prison experience on sexual orientation. We find, that men and women who went to prison are not likely to become homosexuals (Panels A and B). Similarly, we do not find the effect on the close family members in Panel C.

## 5 Conclusion

In this paper, we explore whether prison experience is a significant determinant of anti-gay sentiments. We hypothesize since male homosexuality is stigmatized in prison culture, men who spend time in prisons might end up less supportive of gay rights. We use longitudinal data from Australia to test this hypothesis. We find that, indeed, prison experience is associated with a 0.23 standard deviation decrease in the respondent's support for equal rights for gay persons.

Because of the richness of the longitudinal data, we can exclude several alternative explanations, such as pre-incarceration trends, changes in trust and social capital, socio-economic status, mental health, masculinity norms, and others. Our results are robust to changing the estimation methodology in line with the new differences-in-differences literature.

Our results demonstrate an important source of homophobia that was previously underexplored in quantitative studies: prisons. When policymakers contemplate new reforms that can potentially increase the number of incarcerated individuals, they should take into account

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[14]We find this theory deeply problematic for a variety of reasons.

the potential effects on the level of anti-LGBTQ+ intolerance.

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# Online Appendix

## to

## "Impact of Prison Experience on Anti-Gay Sentiments: Longitudinal Analysis of Inmates and Their Families"

# A    Additional Data Description

**HILDA**    Here we describe the construction of the variables from the Australian Household, Income, and Labour Dynamics in Australia (HILDA) survey. It offers a nationally representative sample of individuals from 2001 to 2019. The codebook for the HILDA data can be found here: <https://www.online.fbe.unimelb.edu.au/HILDAodd/srchKeyWord.aspx>. In all cases when respondents (i) refused to answer (coding -4 in HILDA), (ii) gave multiple responses (coding -5), or (iii) gave implausible values (coding -6) we set observation as missing.[15] We also omit all observations when the respondent appears in HILDA only once because such observations would be absorbed by individual fixed effects. In the end, we have 27,206 unique respondents from 2001 to 2019 that appear in the dataset at least twice.

- Equal rights — based on the variable **mchscr**: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that homosexuals should have equal rights?" We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2005, 2008, 2011, 2015, and 2019.

- 1(Respondent was in prison) — based on the variable **lejls**: "Life events in the past year: Detained in jail/prison." Defined as a dummy equal to one if the respondent has answered that he/she was in prison in any year before year $t$ and zero otherwise. The variable is defined for the following years: 2001–2019.

- 1(Respondent's close family member was in prison) — based on the variable **lejlf**: "Life events in the past year: Close family member detained in jail/prison." Defined as a dummy equal to one if the respondent has answered that her/his family member has returned from prison in any year before year $t$ and zero otherwise. The variable is defined for the following years: 2001–2019.

- 1(Respondent was incarcerated last year) — based on the variable **lejls**: "Life events in the past year: Detained in jail/prison." Defined as a dummy equal to one if the respondent has answered that he/she was in prison in year $t-1$ and zero otherwise. The variable is defined for the following years: 2001–2019.

- 1(Respondent's close family member was incarcerated last year) — based on the variable **lejlf**: "Life events in the past year: Close family member detained in jail/prison." Defined as a dummy equal to one if the respondent has answered that her/his family member has returned from prison in year $t-1$ and zero otherwise. The variable is defined for the following years: 2001–2019.

- 1(Cumulative number of times that the respondent was incarcerated) — based on the variable **lejls**: "Life events in past year: Detained in jail/prison." Defined as the total number of times that the respondent has answered that he/she was in prison before year $t$. The variable is defined for the following years: 2001–2019.

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[15]This results in approximately 1% of the observation being missing. We check that the dummy for missing does not correlate with our treatment (dummy for ever being in prison) or with the respondent's tolerance toward homosexuals.

- 1(Cumulative number of times that the respondent's close family member was incarcerated) — based on the variable **lejlf**: "'Life events in the past year: Close family member detained in jail/prison." Defined as the total number of times that the respondent has answered that his/her family member was in prison before year $t$. The variable is defined for the following years: 2001–2019.

- 1(Number of years that the respondent spent in prison) — based on the variable **lejls**: "Life events in the past year: Detained in jail/prison." Here we assume that if the respondent was in the survey in year $t$, was not in the survey for $n$ years, and then reappears on year $t + n$ and answers that he/she was in prison, then he/she was in prison for $n$ years. If the respondent was in the survey at year $t$ and then on year $t + 1$ he/she says that he/she was in prison last year, we count it as 1 year. The variable is defined for the following years: 2001–2019. Defined as the total number of times that the respondent has answered that he/she was in prison before year $t$. The variable is defined for the following years: 2001–2019.

- 1(Respondent self-identify as a gay person) — based on the variable **lssexor**: "Sexual identity." Defined as a dummy equal to one if the respondent answered (i) gay or lesbian, (ii) bisexual, (iii) other, or (iv) unsure, and zero otherwise. The variable is defined for the following years: 2012 and 2016.

- Most important role in life — being a mother — based on the variable **atwkwrl**: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that whatever career a woman may have, her most important role in life is still of being a mother." We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2001, 2005, 2008, 2011, 2015, and 2019.

- Man earns the money and the woman takes care of the home and children — based on the variable **atwkbmw**: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that it is better for everyone involved if the man earns the money and the woman takes care of the home and children?" We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2001, 2005, 2008, 2011, 2015, and 2019.

- It is not good for a relationship if the woman earns more than the man — based on the variable **atwkmmf**: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that it is not good for a relationship if the woman earns more than the man?" We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2005, 2008, 2011, 2015, and 2019.

- Ihs (# hours volunteering/charity work) — based on the variable **lshrvol**: "Hours per week — Volunteer/Charity work." Because it has zero values we use its inverse hyperbolic sine instead of the log transformation. The variable is defined for the following years: 2001–2019.

- People in the neighborhood can be trusted — based on the variable **lslatr**: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that people in this neighborhood can be trusted?" We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2006, 2010, 2014, and 2018.

- Most people can be trusted — based on the variable **lstrust**: "Please, on a scale from 1 (strongly disagree) to 7 (strongly agree), to which extent do you agree with the statement that generally speaking, most people can be trusted?" We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2005, 2006, 2008, 2010, 2011, 2014, and 2018.

- Ihs (income) — based on the variable **tifdip**: "Financial year disposable regular income (Australian \$)." Because it has zero values we use its inverse hyperbolic sine instead of the log transformation. Income is computed as financial year gross regular income minus taxes on financial year gross regular income. See the HILDA User Manual for details. To preserve the weighted mean, top-coded variables have a value substituted which is the weighted average value of all cases which exceed the threshold. This is always a value greater than the threshold. The variable is defined for the following years: 2001–2019.

- Mental Health: Been a nervous person — based on the variable **gh9b**. We set it to be equal to 0 if the respondent answers "A little of the time" and 5 if — "All of the time." We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2001–2019.

- Mental Health: Felt so down in the dumps nothing could cheer you up — based on the variable **gh9c**. We set it to be equal to 0 if the respondent answers "A little of the time" and 5 if — "All of the time." We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2001–2019.

- Mental Health: Felt calm and peaceful — based on the variable **gh9d** but we define it as "did not feel calm and peaceful." We set it to be equal to 0 if the respondent answers "All of the time" and 5 if — "A little of the time." We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2001–2019.

- Mental Health: Felt down — based on the variable **gh9f**. We set it to be equal to 0 if the respondent answers "A little of the time" and 5 if — "All of the time." We normalize it to have zero mean and standard deviation of one for the sake of interpretation. The variable is defined for the following years: 2001–2019.

- Psychological distress: depressed — based on the variable **pddepr**. We set it to be equal to 0 if the respondent answers "None of the time" and 5 if — "All of the time." We normalize it to have zero mean and standard deviation of one for the sake of

interpretation. The variable is defined for the following years: 2007, 2009, 2011, 2013, 2015, 2017, and 2019.

- Kessler Psychological Distress Scale (K10) score — based on the variable **pdk10s**. The variable runs from 10 to 50 but we adjust it to have a range from 0 to 40 for the sake of interpretation. The variable is defined for the following years: 2007, 2009, 2011, 2013, 2015, 2017, and 2019.

**Other data**

- Intolerance toward homosexuals (country-level) — based on the question "Is the city or area where you live a good place or not a good place to live for gay or lesbian people?" from the Gallup World Poll (available here: https://analyticscampus. gallup.com/). We used the latest data from 2019.

- Incarceration rate per capita (country-level) — taken from the latest World Prison Brief (accessible at PrisonStudies.org, Fair and Walmsley, 2021).

**Table A.1** – Summary Statistics: HILDA

| Variable | Mean | St. dev. | Min. | Max. | # years question was asked |
|---|---|---|---|---|---|
| *Sample: Men* | | | | | |
| Homosexuals should have equal rights | 4.39 | 2.30 | 1 | 7 | 5 |
| Respondent ever was in prison | 0.03 | 0.13 | 0 | 1 | 19 |
| Respondent's close family member ever was in prison | 0.05 | 0.22 | 0 | 1 | 19 |
| # times respondent was in prison | 0.02 | 0.18 | 0 | 6 | 19 |
| # times respondent's close family members were in prison | 0.08 | 0.40 | 0 | 10 | 19 |
| # years respondent spent in prison | 0.05 | 0.39 | 0 | 12 | 19 |
| Respondent was incarcerated last year | 0.008 | 0.06 | 0 | 1 | 19 |
| Respondent's close family member was incarcerated last year | 0.01 | 0.11 | 0 | 1 | 19 |
| Respondent self-identify as a gay | 0.01 | 0.10 | 0 | 1 | 2 |
| # hours volunteering/charity work | 0.79 | 3.24 | 0 | 128 | 19 |
| People in the neighborhood can be trusted | 4.70 | 1.38 | 1 | 7 | 4 |
| Most people can be trusted | 4.76 | 1.33 | 1 | 7 | 7 |
| Most important role in life being a mother | 5.12 | 1.73 | 1 | 7 | 6 |
| Man earns the money and the woman takes care of the home and children | 3.43 | 1.86 | 1 | 7 | 6 |
| It is not good for a relationship if the woman earns more than the man | 2.46 | 1.58 | 1 | 7 | 5 |
| Income, Australian dollars | 44,235 | 43,242 | 0 | 877,097 | 19 |
| # times same respondent appears in HILDA | 10.12 | 6.15 | 2 | 19 | - |
| *Sample: Women* | | | | | |
| Homosexuals should have equal rights | 5.04 | 2.20 | 1 | 7 | 5 |
| Respondent ever was in prison | 0.01 | 0.08 | 0 | 1 | 19 |
| Respondent's close family member ever was in prison | 0.07 | 0.25 | 0 | 1 | 19 |
| # times respondent was in prison | 0.01 | 0.10 | 0 | 6 | 19 |
| # times respondent's close family members were in prison | 0.12 | 0.60 | 0 | 13 | 19 |
| # years respondent spent in prison | 0.02 | 0.24 | 0 | 17 | 19 |
| Respondent was incarcerated last year | 0.002 | 0.04 | 0 | 1 | 19 |
| Respondent's close family member was incarcerated last year | 0.02 | 0.13 | 0 | 1 | 19 |
| Respondent self-identify as a gay | 0.02 | 0.13 | 0 | 1 | 2 |
| # hours volunteering/charity work | 0.90 | 3.25 | 0 | 128 | 19 |
| People in the neighborhood can be trusted | 4.71 | 1.43 | 1 | 7 | 4 |
| Most people can be trusted | 4.84 | 1.37 | 1 | 7 | 7 |
| Most important role in life being a mother | 5.38 | 1.81 | 1 | 7 | 6 |
| Man earns the money and the woman takes care of the home and children | 3.01 | 1.93 | 1 | 7 | 6 |
| It is not good for a relationship if the woman earns more than the man | 2.36 | 1.64 | 1 | 7 | 5 |
| Income, Australian dollars | 30,483 | 28,189 | 0 | 877,097 | 19 |
| # times same respondent appears in HILDA | 10.6 | 6.22 | 2 | 19 | - |

*Notes*: This Table shows summary statistics for the main outcome and explanatory variables from the HILDA longitudinal survey. In total, survey covers the years from 2001 to 2019. There are 288,073 observations in total, of them 136,456 — males. There are 27,206 unique respondents in the data, of them 13,219 — males.

# B  Additional Results

**Table B.1** – Robustness for Table 1 Panel C: Alternative Samples

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | | |
| *Panel A: ~Panel C w All respondents* | | | | | | | |
| 1(Respondent's close family | -0.023* | -0.022* | -0.025* | -0.025* | -0.033** | -0.028** | -0.029** |
|     member was in prison) | (0.013) | (0.013) | (0.013) | (0.013) | (0.013) | (0.013) | (0.013) |
| Female FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| R-squared | 0.764 | 0.764 | 0.770 | 0.775 | 0.779 | 0.792 | 0.792 |
| Observations | 68,549 | 68,549 | 68,549 | 68,549 | 68,549 | 68,549 | 68,549 |
| *Panel B: ~Panel C w Sample of women* | | | | | | | |
| 1(Respondent's close family | -0.013 | -0.013 | -0.012 | -0.013 | -0.022 | -0.043 | -0.023 |
|     member was in prison) | (0.015) | (0.015) | (0.015) | (0.015) | (0.016) | (0.027) | (0.016) |
| R-squared | 0.767 | 0.768 | 0.778 | 0.783 | 0.789 | 0.803 | 0.806 |
| Observations | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: This Table replicates Panel C of Table 1 but uses different samples. Panel A estimates it on the sample of both, male and female respondents. Panel A additionally controls for the respondent's gender fixed effects. Panel B estimates it on the sample of female respondents. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.2** – Robustness for Table 1: Alternative Exposure to Prison Culture (# of Times in Prison)

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| # times respondent was in prison | -0.158*** | -0.158*** | -0.196*** | -0.196*** | -0.193*** | -0.175*** | -0.175*** |
| | (0.058) | (0.059) | (0.062) | (0.064) | (0.064) | (0.067) | (0.067) |
| R-squared | 0.751 | 0.751 | 0.763 | 0.768 | 0.775 | 0.803 | 0.803 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| *Panel B: Sample of women* | | | | | | | |
| # times respondent was in prison | -0.095 | -0.094 | -0.081 | -0.092 | -0.109* | -0.066 | -0.066 |
| | (0.058) | (0.058) | (0.060) | (0.062) | (0.064) | (0.075) | (0.076) |
| R-squared | 0.767 | 0.768 | 0.778 | 0.783 | 0.789 | 0.806 | 0.806 |
| Observations | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 |
| *Panel C: Sample of men* | | | | | | | |
| # times respondent's close family | -0.038 | -0.037 | -0.047* | -0.046* | -0.056** | -0.043* | -0.044* |
| member was in prison | (0.025) | (0.026) | (0.027) | (0.027) | (0.027) | (0.026) | (0.026) |
| R-squared | 0.751 | 0.751 | 0.762 | 0.768 | 0.775 | 0.803 | 0.803 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: This Table replicates Table 1 but uses different explanatory variables. Panels A and B use the total number of times that the respondent went to prison by year $t$ instead of a dummy. Panel C uses the total number of times that the respondent has a close family member returning to prison by year $t$ instead of a dummy. Note, that if more than two family members return from prison in the same year we can't distinguish them and, thus, we may undercount it. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

**Table B.3** – Robustness for Table 1: Alternative Exposure to Prison Culture (# of Years in Prison)

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| # years respondent spent in prison | -0.158*** | -0.158*** | -0.196*** | -0.196*** | -0.193*** | -0.175*** | -0.175*** |
| | (0.058) | (0.059) | (0.062) | (0.064) | (0.064) | (0.067) | (0.067) |
| R-squared | 0.751 | 0.751 | 0.763 | 0.768 | 0.775 | 0.803 | 0.803 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| *Panel B: Sample of women* | | | | | | | |
| # years respondent spent in prison | -0.095 | -0.094 | -0.081 | -0.092 | -0.109* | -0.066 | -0.066 |
| | (0.058) | (0.058) | (0.060) | (0.062) | (0.064) | (0.075) | (0.076) |
| R-squared | 0.767 | 0.768 | 0.778 | 0.783 | 0.789 | 0.806 | 0.806 |
| Observations | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: This Table replicates Table 1 but uses different explanatory variables. Panels A and B use the total number of years that the respondent spent in prison by year $t$ instead of a dummy. To compute the number of years that a person spent in prison we assume that if the person appears in the data in year $t$ and then is not present in the survey for $j$ years and re-appears in year $t + j + 1$ and says that she/he was in prison last year, we count that she/he spent $j + 1$ years in prison. Note, that we can't estimate Panel C from Table 1 here because we do not have longitudinal data on close family members who returned from prison to compute the number of years that they spent in prison. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.4** – Robustness for Table 1: Specification with Population Weights

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| 1(Respondent was in prison) | -0.285*** | -0.287*** | -0.363*** | -0.361*** | -0.375*** | -0.391*** | -0.392*** |
| | (0.106) | (0.106) | (0.107) | (0.110) | (0.111) | (0.109) | (0.110) |
| R-squared | 0.755 | 0.755 | 0.771 | 0.778 | 0.787 | 0.820 | 0.820 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| *Panel B: Sample of women* | | | | | | | |
| 1(Respondent was in prison) | -0.188* | -0.183* | -0.140 | -0.159 | -0.151 | -0.112 | -0.113 |
| | (0.107) | (0.106) | (0.108) | (0.111) | (0.115) | (0.135) | (0.135) |
| R-squared | 0.773 | 0.774 | 0.788 | 0.794 | 0.802 | 0.822 | 0.822 |
| Observations | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 | 36,466 |
| *Panel C: Sample of men* | | | | | | | |
| 1(Respondent's close family | -0.106* | -0.105* | -0.126** | -0.112* | -0.116* | -0.115** | -0.115** |
| member was in prison) | (0.060) | (0.060) | (0.060) | (0.059) | (0.060) | (0.056) | (0.056) |
| R-squared | 0.754 | 0.755 | 0.771 | 0.777 | 0.787 | 0.819 | 0.820 |
| Observations | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 | 32,083 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: This Table replicates Table 1 but uses HILDA's population weights. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.5** – Robustness for Table 1: Alternative Methods of Estimating Differences-in-Differences Estimates

| | I | II | III | IV | V |
|---|---|---|---|---|---|
| | | | Dependent variable: Homosexuals should have equal rights | | |
| _Method_ | OLS (baseline) | Borusyak et al. (2021) | de Chaisemartin and D'Haultfoeuille (2022) | Callaway and Sant'Anna (2021) | Sun and Abraham (2021) |
| _Panel A: Sample of men_ | | | | | |
| 1(Respondent was in prison) | -0.279*** | -0.193*** | -0.229*** | -0.129** | -0.103* |
| | (0.086) | ( 0.081) | (0.067) | (0.066) | (0.060) |
| _Panel B: Sample of women_ | | | | | |
| 1(Respondent was in prison) | -0.129 | 0.097 | -0.152 | -0.039 | -0.076 |
| | (0.126) | (0.095) | (0.123) | (0.075) | (0.119) |
| _Panel C: Sample of men_ | | | | | |
| 1(Respondent's close family member was in prison) | -0.135** | -0.081* | -0.148* | -0.065 | -0.068* |
| | (0.055) | (0.048 ) | (0.088) | (0.067 ) | (0.041) |

_Notes_: This Table re-estimates the most conservative specification from Column VII of Table 1 but uses a different method of computing the average post-treatment differences-in-differences coefficient. Column I contains the baseline OLS estimate for reference. Column II uses the method proposed in Borusyak, Jaravel and Spiess (2021). Column III uses the method proposed in De Chaisemartin and D'Haultfoeuille (2022). Column IV uses method proposed in Callaway and Sant'Anna (2021). Column V uses the method proposed in Sun and Abraham (2021). Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.6** – Event-Study Coefficients for Figure 2

|  | I | II | III |
|---|---|---|---|
|  | Dependent variable: Homosexuals should have equal rights | | |
| Sample | Men | Women | Men |
| Event | R's incarceration | R's incarceration | R's close family member incarceration |
| >12 years before event | 0.200 | 0.183 | 0.086 |
|  | (0.181) | (0.149) | (0.108) |
| 8 years before event | 0.165 | 0.056 | -0.014 |
|  | (0.129) | (0.195) | (0.084) |
| 1st year after event | -0.251** | -0.045 | -0.139** |
|  | (0.105) | (0.147) | (0.066) |
| 4 years after event | -0.135 | -0.136 | -0.115* |
|  | (0.120) | (0.175) | (0.069) |
| 8 years after event | -0.049 | -0.256 | -0.177** |
|  | (0.143) | (0.157) | (0.087) |
| >12 years after event | -0.317* | -0.305 | -0.117 |
|  | (0.164) | (0.282) | (0.093) |
|  |  |  |  |
| Joint F-test for pre-trend coef., p-value | [0.5773] | [0.4713] | [0.7185] |
| R-squared | 0.810 | 0.806 | 0.806 |
| Observations | 32,083 | 36,466 | 32,083 |

*Notes*: This Table estimates event-study specification 2. We use the same (most demanding) set of controls as in Column VII of Table 1. Column I corresponds to Column VII of Panel A, Column II — Panel B, and Column III — Panel C. The event is the first time when a respondent answered that he/she was in prison last year (or a close family member returned from prison last year). Thus all periods there are in relative terms. Because the question about attitudes toward homosexuals was asked every 4 years, periods also represent 4-year intervals. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

**Table B.7** – Robustness for Table 1: Results Hold on Subsample of Respondents that Entered Survey by the Age of 18

| | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | |
| Sample | Men ≤18y.o. | Men >18y.o. | Women ≤18y.o. | Women >18y.o. | Men ≤18y.o. | Men >18y.o. |
| 1(Respondent was in prison) | -0.246** | -0.249** | -0.113 | -0.146 | | |
| | (0.115) | (0.097) | (0.126) | (0.134) | | |
| 1(Respondent's close family member was in prison) | | | | | -0.224* | -0.100* |
| | | | | | (0.137) | (0.056) |
| R-squared | 0.673 | 0.760 | 0.706 | 0.767 | 0.673 | 0.759 |
| Observations | 4,995 | 27,088 | 5,691 | 30,775 | 4,995 | 27,088 |

*Notes*: This Table replicates Column I of Table 1 but uses different samples. Columns I, III, and V only use respondents who entered the survey at the age of 18 or earlier. Columns II, IV, and VI only use respondents who entered the survey at the age of 19 or later. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.8** – Robustness for Table 1: Specification with Interviewer Fixed Effects

| | I | II | III |
|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | |
| Sample | Men | Women | Men |
| 1(Respondent was in prison) | -0.280*** | -0.141 | |
| | (0.087) | (0.127) | |
| 1(Respondent's close family | | | -0.123** |
|     member was in prison) | | | (0.056) |
| R-squared | 0.809 | 0.811 | 0.809 |
| Observations | 32,083 | 36,466 | 32,083 |

*Notes*: This Table replicates Column VII of Panel A, B, and C of Table 1 but controls for the interviewer fixed effects. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Figure B.1** – Results are Not Driven by a Particular Age-Bin of Respondents Entering HILDA Survey
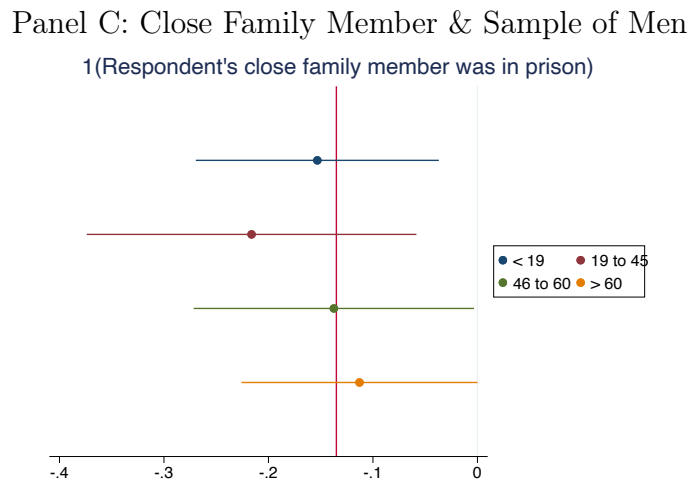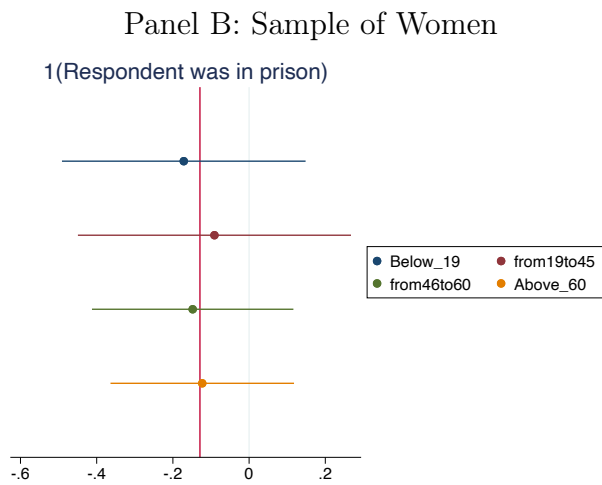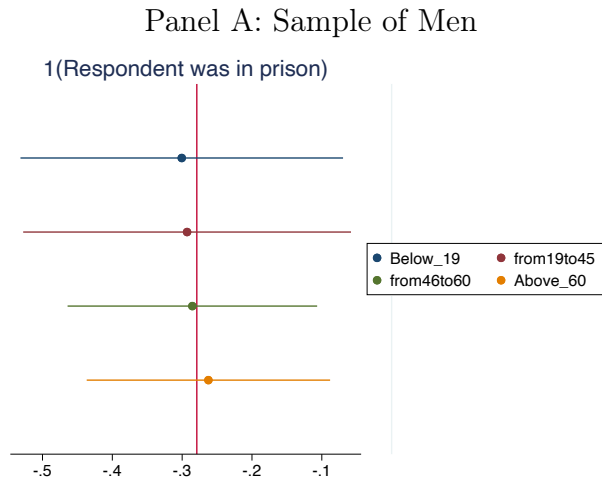
Panel A: Sample of Men



Panel B: Sample of Women



Panel C: Close Family Member & Sample of Men



*Notes*: This Figure reports on the point-estimate and 90th-percent confidence band that results when re-estimating the specification in Column VII of Table 1, dropping one age bin (age of the respondent entering the HILDA survey for the first time) at a time. The (red) vertical line is the baseline point estimate. The results are sorted top-to-bottom, i.e., omit below 19 age group, then 19–45, then 46–60, and above 60.

**Figure B.2** – Results are Not Driven by a Particular State
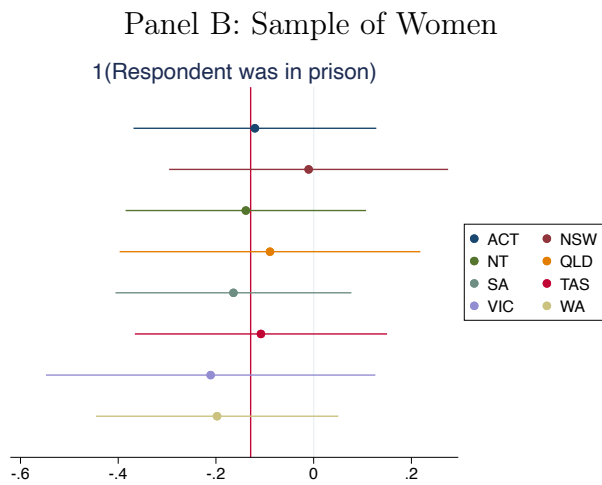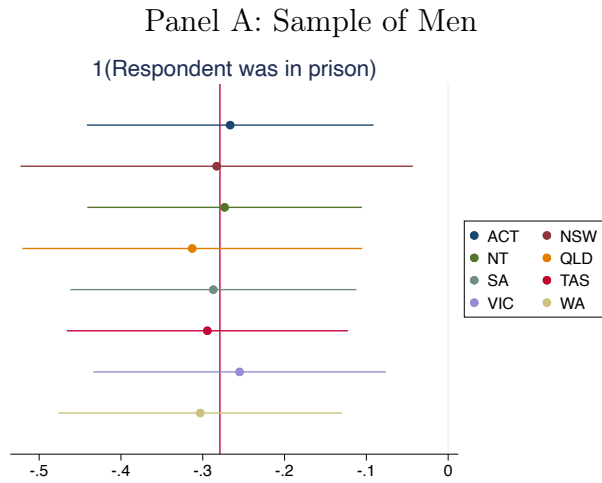
Panel A: Sample of Men



Panel B: Sample of Women



Panel C: Close Family Member & Sample of Men



*Notes*: This Figure reports on the point-estimate and 90th-percent confidence band that results when re-estimating the specification in Column VII of Table 1, dropping one state at a time. The (red) vertical line is the baseline point estimate. The results are sorted alphabetically, i.e., omit the Australian Capital Territory, then New South Wales, then Northern Territory, etc.

**Figure B.3** – Results are Not Driven by a Particular Religious Group

Panel A: Sample of Men



Panel B: Sample of Women



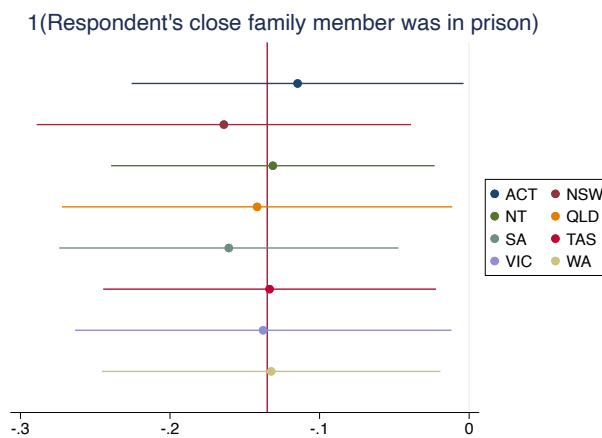Panel C: Close Family Member & Sample of Men



*Notes*: This Figure reports on the point-estimate and 90th-percent confidence band that results when re-estimating the specification in Column VII of Table 1, dropping one religious group at a time. The (red) vertical line is the baseline point estimate.

**Figure B.4** – Results are Not Driven by a Particular Educational Group
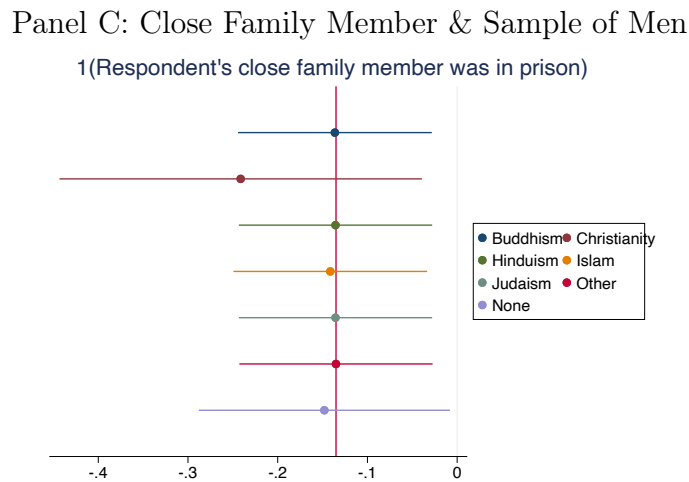
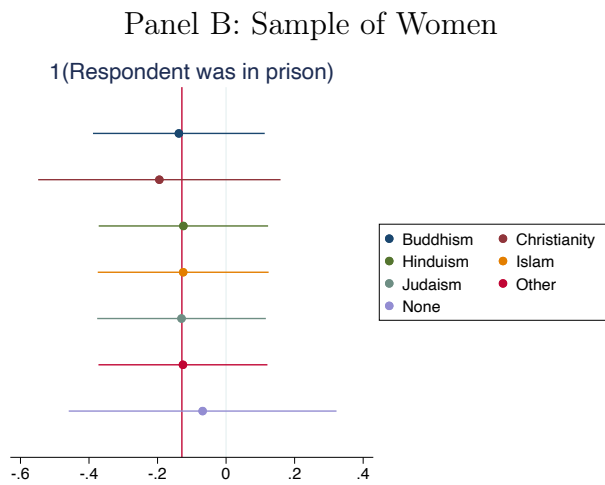Panel A: Sample of Men
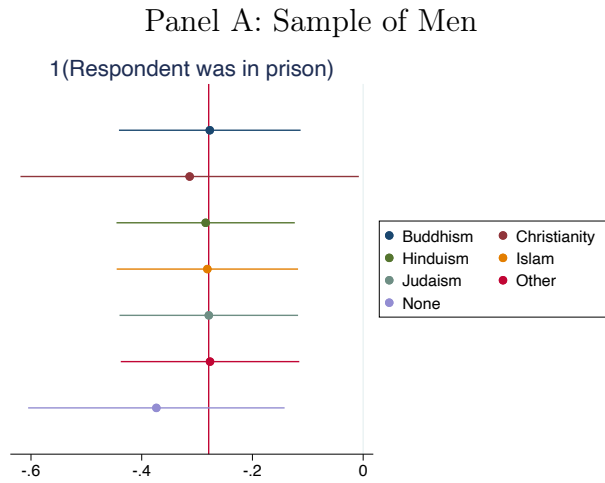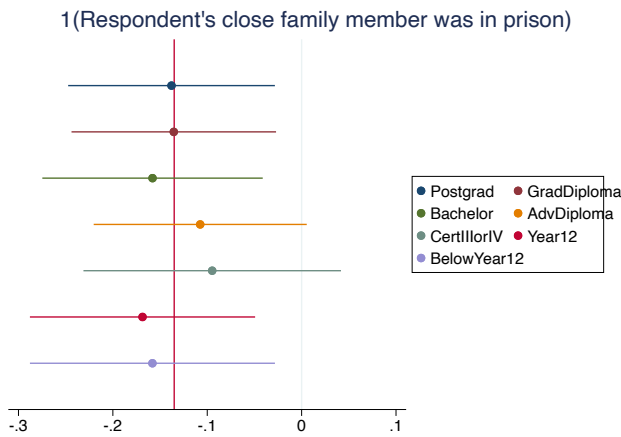


Panel B: Sample of Women
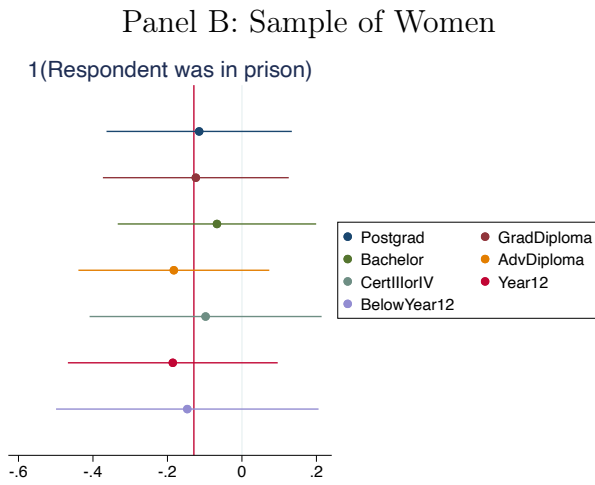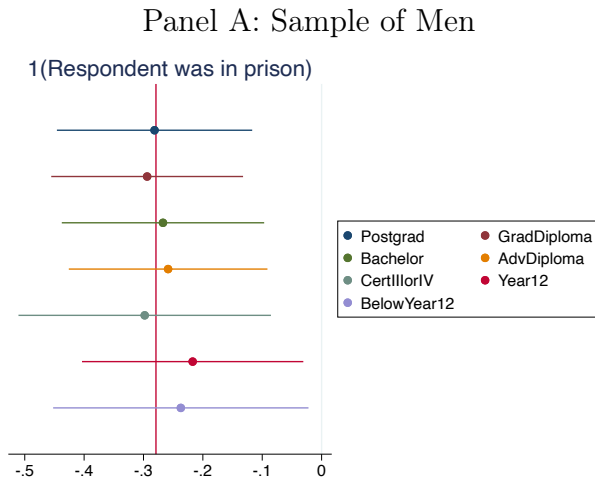


Panel C: Close Family Member & Sample of Men



*Notes*: This Figure reports on the point-estimate and 90th-percent confidence band that results when re-estimating the specification in Column VII of Table 1, dropping one education group at a time. The (red) vertical line is the baseline point estimate.

**Table B.9** – Effect of Prison Experience on Reduction in Tolerance Toward Homosexuals: Matching Estimation

| | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | |
| Sample | Men | | Women | | Men | |
| Matching | Nearest neighbor | Kernel | Nearest neighbor | Kernel | Nearest neighbor | Kernel |
| ATT: 1(Respondent was in prison) | -0.276 | -0.238 | -0.122 | -0.129 | | |
| | (0.061) | - | (0.093) | - | | |
| | [0.075] | [0.036] | [0.096] | [0.065] | | |
| ATT: 1(Respondent's close family member was in prison) | | | | | -0.109 | -0.115 |
| | | | | | (0.036) | - |
| | | | | | [0.039] | [0.027] |
| # treated | 541 | 541 | 227 | 227 | 1,598 | 1,598 |
| # controls | 541 | 29,478 | 227 | 33,678 | 1,708 | 30,438 |

*Notes*: All blocks are balanced. Standard errors computed using analytical standard errors are in parentheses. Bootstrapped standard errors are in brackets *** p<0.01, ** p<0.05, * p<0.1

**Table B.10** – Homophobic Persons Are Not More Likely To Be Incarcerated

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: 1(Respondent was incarcerated) | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| Homosexuals should have equal rights | -0.00042 | -0.00042 | -0.00024 | -0.00027 | -0.00025 | -0.00033 | -0.00033 |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| R-squared | 0.232 | 0.233 | 0.249 | 0.256 | 0.260 | 0.282 | 0.282 |
| Observations | 86,700 | 86,700 | 86,700 | 86,700 | 86,700 | 86,700 | 86,700 |
| *Panel B: Sample of women* | | | | | | | |
| Homosexuals should have equal rights | 0.00007 | 0.00007 | 0.00006 | 0.00007 | 0.00008 | 0.00006 | 0.00006 |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| R-squared | 0.194 | 0.195 | 0.212 | 0.224 | 0.229 | 0.244 | 0.244 |
| Observations | 99,915 | 99,915 | 99,915 | 99,915 | 99,915 | 99,915 | 99,915 |
| *Panel C: Sample of men* | Dependent variable: 1(Respondent's close family member was incarcerated) | | | | | | |
| Homosexuals should have equal rights | -0.00042 | -0.00042 | -0.00048 | -0.00043 | -0.00029 | -0.00053 | -0.00053 |
| | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Female FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| R-squared | 0.274 | 0.275 | 0.284 | 0.291 | 0.299 | 0.329 | 0.329 |
| Observations | 86,700 | 86,700 | 86,700 | 86,700 | 86,700 | 86,700 | 86,700 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.11** – Prison Experience Does Not Affect Attitudes Toward Women

| | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| | | | Dependent variable: | | | |
| | Most important role in life - - being a mother | | Man earns the money and the woman takes care of the home and children | | It is not good for a relationship if the woman earns more than the man | |
| Sample | Men | Women | Men | Women | Men | Women |
| 1(Respondent was in prison) | -0.071 | -0.005 | -0.005 | 0.058 | -0.127 | 0.096 |
| | (0.093) | (0.095) | (0.095) | (0.127) | (0.117) | (0.171) |
| R-squared | 0.641 | 0.725 | 0.725 | 0.734 | 0.624 | 0.632 |
| Observations | 27,772 | 27,780 | 27,780 | 32,081 | 27,762 | 32,048 |

*Notes*: This Table replicates Column VII of Table 1 but uses different outcome variables. Columns I, III, and V estimate regression in the sample of men. Columns II, IV, and VI estimate regression in the sample of women. All three dependent variables are ordinal variables varying from 1 to 7 that we normalize to have zero mean and standard deviation of one for the sake of interpretation. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

**Table B.12** – Prison Experience Does Not Affect Social Capital and Trust

| Sample | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| | | | Dependent variable: | | | |
| | Ihs (# hours volunteering/charity work) | | People in the neighborhood can be trusted | | Most people can be trusted | |
| | Men | Women | Men | Women | Men | Women |
| 1(Respondent was in prison) | -0.013 | 0.033 | 0.153 | -0.018 | 0.051 | -0.045 |
| | (0.030) | (0.045) | (0.121) | (0.183) | (0.119) | (0.171) |
| R-squared | 0.571 | 0.536 | 0.728 | 0.700 | 0.744 | 0.718 |
| Observations | 110,720 | 125,829 | 20,976 | 24,356 | 21,043 | 24,453 |

*Notes*: This Table replicates Column VII of Table 1 but uses different outcome variables. Columns I, III, and V estimate regression in the sample of men. Columns II, IV, and VI estimate regression in the sample of women. All three dependent variables are ordinal variables varying from 1 to 7 that we normalize to have zero mean and standard deviation of one for the sake of interpretation. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

**Table B.13** – Mental Health Does Not Correlate with the Attitudes toward Gay Persons

| | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | |
| Measure of X | Been a nervous person | Nothing could cheer you up | Did not feel calm and peaceful | Felt down | Depressed | Kessler psychologic al distress score |
| *Panel A: Sample of men* | | | | | | |
| Mental health/Psychological distress measure | 0.002 | -0.004 | -0.008 | -0.004 | 0.011 | -0.001 |
| | (0.007) | (0.007) | (0.006) | (0.007) | (0.011) | (0.002) |
| R-squared | 0.804 | 0.805 | 0.805 | 0.805 | 0.854 | 0.854 |
| Observations | 27,265 | 27,265 | 27,265 | 27,265 | 17,015 | 17,015 |
| *Panel B: Sample of women* | | | | | | |
| Mental health/Psychological distress measure | -0.006 | 0.000 | -0.003 | 0.006 | -0.003 | -0.003** |
| | (0.006) | (0.006) | (0.005) | (0.005) | (0.009) | (0.001) |
| R-squared | 0.807 | 0.807 | 0.807 | 0.807 | 0.850 | 0.850 |
| Observations | 31,577 | 31,577 | 31,577 | 31,577 | 19,915 | 19,915 |

*Notes*: This Table replicates Column VII of Table 1 but uses different explanatory variables. Panel A estimates regressions on the sample of men. Panel B estimates regressions on the sample of women. Explanatory variables in Columns I–V are ordinal variables varying from 0 to 5 that we normalize to have zero mean and standard deviation of one for the sake of interpretation. The explanatory variable in Column VI is ordinal variables varying from 0 to 40. Standard errors clustered at the individual level, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

**Table B.14** – Robustness for Table 1: Controlling for Respondents' Mental Health

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: Homosexuals should have equal rights | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| 1(Respondent was in prison) | -0.282*** | -0.279*** | -0.264*** | -0.292*** | -0.420*** | -0.409** | -0.419*** |
| | (0.085) | (0.085) | (0.085) | (0.085) | (0.160) | (0.160) | (0.161) |
| R-squared | 0.805 | 0.805 | 0.805 | 0.805 | 0.854 | 0.854 | 0.857 |
| Observations | 27,244 | 27,244 | 27,244 | 27,244 | 17,003 | 17,003 | 17,003 |
| *Panel B: Sample of women* | | | | | | | |
| 1(Respondent was in prison) | -0.116 | -0.126 | -0.080 | -0.177 | -0.155 | -0.070 | -0.031 |
| | (0.125) | (0.126) | (0.113) | (0.128) | (0.160) | (0.140) | (0.147) |
| R-squared | 0.807 | 0.807 | 0.807 | 0.807 | 0.850 | 0.850 | 0.851 |
| Observations | 31,541 | 31,541 | 31,541 | 31,541 | 19,896 | 19,896 | 19,896 |
| *Panel C: Sample of men* | | | | | | | |
| 1(Respondent's close family member was in prison) | -0.142*** | -0.134** | -0.132** | -0.128** | -0.169* | -0.185** | -0.163* |
| | (0.055) | (0.055) | (0.055) | (0.054) | (0.087) | (0.088) | (0.088) |
| R-squared | 0.804 | 0.805 | 0.805 | 0.805 | 0.854 | 0.854 | 0.857 |
| Observations | 27,244 | 27,244 | 27,244 | 27,244 | 17,003 | 17,003 | 17,003 |
| Baseline controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Been a nervous person | ✓ | | | | | | ✓ |
| Felt so down in the dumps nothing could cheer you up | | ✓ | | | | | ✓ |
| Did not feel calm and peaceful | | | ✓ | | | | ✓ |
| Felt down | | | | ✓ | | | ✓ |
| Psychological distress, depressed | | | | | ✓ | | ✓ |
| Kessler psychological distress score | | | | | | ✓ | ✓ |

*Notes*: This Table replicates Column VII of Table 1 but adds additional control variables. Note, that the number of observations is smaller than in Table 1 because of the missing values in variables describing mental health and because variables "Depressed" and "Kessler psychological distress score" were not asked every year. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

**Table B.15** – Men are Not More Likely to Become Gay in Prison

| | I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|---|
| | Dependent variable: 1(Respondent self-identify as a gay) | | | | | | |
| *Panel A: Sample of men* | | | | | | | |
| 1(Respondent was in prison) | -0.008 | -0.005 | -0.000 | 0.014 | 0.007 | -0.029 | -0.029 |
| | (0.046) | (0.046) | (0.047) | (0.043) | (0.042) | (0.038) | (0.038) |
| R-squared | 0.790 | 0.791 | 0.804 | 0.806 | 0.826 | 0.875 | 0.875 |
| Observations | 11,554 | 11,554 | 11,554 | 11,554 | 11,554 | 11,554 | 11,554 |
| *Panel B: Sample of women* | | | | | | | |
| 1(Respondent was in prison) | -0.009 | -0.009 | 0.039 | 0.044 | 0.069 | 0.111 | 0.111 |
| | (0.071) | (0.070) | (0.057) | (0.057) | (0.060) | (0.083) | (0.082) |
| R-squared | 0.784 | 0.785 | 0.806 | 0.805 | 0.822 | 0.856 | 0.856 |
| Observations | 13,576 | 13,576 | 13,576 | 13,576 | 13,576 | 13,576 | 13,576 |
| *Panel C: Sample of men* | | | | | | | |
| 1(Respondent's close family | -0.009 | -0.013 | -0.010 | -0.008 | -0.014 | -0.038 | -0.038 |
| member was in prison) | (0.030) | (0.030) | (0.031) | (0.032) | (0.032) | (0.040) | (0.040) |
| R-squared | 0.790 | 0.791 | 0.804 | 0.806 | 0.826 | 0.875 | 0.875 |
| Observations | 11,554 | 11,554 | 11,554 | 11,554 | 11,554 | 11,554 | 11,554 |
| Respondent FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FEs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| State-Year FEs | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Religion x age & YoB FEs | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethnicity x age & YoB FEs | | | | ✓ | ✓ | ✓ | ✓ |
| Education x age & YoB FEs | | | | | ✓ | ✓ | ✓ |
| Occupation x age & YoB & year FEs | | | | | | ✓ | ✓ |
| Ihs Income | | | | | | | ✓ |

*Notes*: This Table replicates Table 1 but uses a different dependent variable — dummy, for a respondent to self-identify with the LGBTQ+ community. Standard errors clustered at the individual level, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1