# Is there discrimination against children of same-sex households?

Evidence from an experimental study in Colombia

Natalia Cantet\* Brian Feld<sup>†</sup> Mónica Hernández<sup>‡</sup>

This version: September 7, 2022 Click here for the latest version

#### Abstract

We measure the extent of discrimination against same-sex couples by schools in Colombia using a matched-pair correspondence study. We send requests to visit private schools from several couples of different sexual orientation as conveyed by the names of the parents. We track the response rate from schools, the time to reply and the quality of the reply. We find that schools are 11.7 percentage points (21.9%) less likely to respond to a request sent by a homosexual couple with respect to one sent by a heterosexual one. When no information about sexual orientation is provided, the response rate decreases by 20pp. (37%) versus an explicitly heterosexual couple. Conditional on replying, we find no difference in the time schools take to respond or the quality of the reply across couples, a result plausibly driven by selection into responding. Our findings suggest that, despite a strong legal framework that protects LGBTQ+ rights, discrimination against same-sex couples is pervasive and can have intergenerational consequences.

<sup>\*</sup>Department of Economics, Universidad EAFIT. E-mail: mncantet@eafit.edu.co

<sup>&</sup>lt;sup>†</sup>Department of Economics, Universidad EAFIT. E-mail: bhfeld@eafit.edu.co

<sup>&</sup>lt;sup>‡</sup>Department of Economics, Universidad EAFIT. E-mail: mhernande6@eafit.edu.co

The project was registered on the AEA RCT Registry (AEARCTR-0008802). This study was made possible thanks to the generous contribution of the Inter-American Development Bank's Research Network Project: LGBTQ+ Persons in Latin America and the Caribbean. The authors would like to thank Michael Cardona Rodríguez, Susana Mojica Restrepo, Lina Dáz Mesa, Luis Mena Moreno, Alejandra Jaramillo Rojas, Karen Atis Ortega, Germán Angulo Cambindo, Mariana Lopera Suárez, Laura Quintero Vásquez, Maria Paula Castelblanco Lpez and Natalia Anaya Lopera for their excellent research assistance. This paper benefited from comments by Samuel Berlinski, Erik Plug and Emily Beam, as well as participants in the IDB First Seminar of Research Network Project: LGBTQ+ Persons in Latin America and the Caribbean, the 2022 Advances with Field Experiments conference, the IDB Second Seminar of Research Network Project: LGBTQ+ Persons in Latin America and the Caribbean, and the University of South Carolina.

## 1 Introduction

Discrimination against individuals based on their sexual identity and orientation remains pervasive despite efforts made in the last two decades to recognize and strengthen their rights. For example, according to the data from the Seventh World Values Survey, 47% of individuals do not find homosexuality justifiable under any circumstance, 48% would not like a homosexual as their neighbor, and only 32% agree that homosexual couples are as good as parents as other couples (Haerpfer et al., 2022).

While discrimination against people based on their sexual orientation has been mostly focused on the labor (Drydakis, 2009; Tilcsik, 2011; Mishel, 2016) and housing (Ahmed et al., 2008; Ahmed & Hammarstedt, 2009; Murchie & Pang, 2018) markets, little is known about the experience faced by homosexual people in other areas. Of particular concern is the way schools handle children from same-sex households. If schools prevent or put in place barriers to the enrollment of children with same-sex parents, this could severely limit the options available to parents and lead them to make suboptimal choices. This could in turn affect the future outcomes of their children, such as their earnings and wealth (Chetty et al., 2011; Chetty et al., 2016), and health (Conti et al., 2016). In other words, this instance of discrimination, even though targeted at parents, would have negative effects on their children. Yet, to our knowledge there is only one study exploring this (Diaz-Serrano & Meix-Llop, 2016), and it is restricted to a particular region of one country (Catalonia, Spain).

In this paper, we aim to broaden our understanding of how schools behave toward parents based on their sexual orientation. To do this, we conducted a matched-pair correspondence study in Colombia. We sent fictitious requests for school visits to private schools across the country, randomly varying the names of both parents to convey different sexual orientations. We track the requests and compare the response rates and the content of responses that these couples receive from school officials. We study whether there is discrimination against homosexual parents and its extent by analyzing the are differences in response rates, response time and response quality across couples.

Colombia is a very appropriate setting to study discrimination against homosexual parents

for two reasons. First, while Colombia is a predominantly Catholic and devout country (80% of its 48 million inhabitants are Catholic, and almost 60% are practicing religious), in the last decade the country has passed very progressive legal protections for the LGBTQ+ community (Encarnación, 2016), including an explicit ban on discrimination based on sexual orientation in 2011, and the legalization of adoption and marriage of same-sex couples in 2015 and 2016, respectively. Hence, this study can inform academics and policymakers in other countries or regions where policy and opinion go in opposite directions, such as in conservative US states subject to Federal policies and Supreme Court rulings.

Second, with regards to education, almost half of the schools in the country are private and almost 20% of students attend private schools, similar to other Latin American countries but almost twice as much as the OECD average (World Bank, 2022). Moreover, private schools are tend to be of higher quality than public schools (as suggested by the higher performance of students in standardized tests), and are thus are usually sought after by many parents. This means that the study of attitudes by private schools (and in particular whether they discriminate against same-sex parents) in the country is relevant for a large proportion of the population of the country.

Our findings point to marked discrimination by schools against nontraditional couples. Same-sex couples are between 15% and 22% less likely to receive a response compared to their heterosexual counterparts, depending on the model used. In addition, we observe that when a request is written in plural but is only signed by one parent (conveying no information on parents' sexual orientation), schools are up to 37% less likely to reply compared to requests signed by two parents of opposite sex, a result driven exclusively by requests sent by male writers. This result could be explained by the combination of two factors: differential inference from the school regarding the composition of the household based on the gender who writes the request when only one person signs, and differences in salience of the potential for prejudice for schools between requests written by explicitly homosexual couples and those signed by only one parent.

We take advantage of the wealth of data about school characteristics to estimate heterogeneous treatment effects by school characteristics and location. First, we find that lower quality schools (proxied by standardized test scores) are more likely to discriminate against non-traditional couples than high-quality ones, something that could be related to the managerial ability of school officials, in this case to hire high-quality teachers. This lower ability may also be behind the higher rate of discrimination against nontraditional couples.

Discrimination against openly homosexual couples is also higher in schools of lower socioeconomic status. This implies that economically vulnerable homosexual couples are at higher risk of facing discrimination, and thus have fewer alternatives to educate their children. However, we observe significantly lower response rates in schools with students of higher SES than those of low socio-economic status among couples who do not disclose their sexual orientation, which could further reinforce the hypothesis that schools ignore requests from couples when discrimination against a minority group is less salient.

We also look at whether discrimination against same-sex couples differs between secular and religious schools. We find that only the latter are less likely to respond to requests sent by same-sex couples or couples that do not provide information about their sexual orientation compared to to explicitly heterosexual couples. This means that it may be more difficult for non-traditional couples to invest in religious education for their children, and in the particular case of Colombia it can severely restrict the choice set of schools for parents since the majority of private schools are religious.

Finally, schools headed by men are between two and three times more likely to discriminate against same-sex couples and those that do not disclose their sexual orientation than schools that have a female principal. This result is in line with other studies that find evidence that men are more likely than women to discriminate against women and minorities (Boring, 2017; Mengel et al., 2019; Egan et al., 2022).

Even if schools reply to requests from couples of various sexual orientation, the type of answers given to each couple may be different. Hence, conditional on replying, we analyze whether there are differences in the time it takes for schools to reply to our requests and the quality of these responses. We do not find any differences in either of these measures, a result plausibly driven by selection into responding.

In summary, our findings suggest that, despite a strong legal framework that protects LGBTQ+ rights, school discrimination against same-sex couples in Colombia is pronounced. Moreover, hiding their sexual orientation from the beginning does not seem like a good

strategy for these couples to "get a foot on the door". While other studies have found evidence of school discrimination when the cost of education for schools is higher (Bergman & McFarlin Jr, 2020), the sexual orientation of the parents is unlikely to be correlated with education costs. If anything, same-sex couples in Colombia are wealthier and more educated than heterosexual couples. Thus, there seems to be a need for policies that make the admission process for private schools more transparent to reduce the scope of discrimination based on parents' traits.

This paper contributes to the broad literature of discrimination. First, we focus on discrimination based on sexual orientation, an area within this field that has received relatively little attention until recently. Studies using survey, census and registry data have found evidence that that men in gay partnerships have lower wages and income than men in heterosexual relationships, and that the opposite is true for women in lesbian partnerships (Clain & Leppel, 2001; Black et al., 2003; Black et al., 2007; Antecol et al., 2008; Klawitter, 2015). Regarding health, they have revealed that LGBTQ+ individuals are more likely to report unfavorable primary care experiences, as well as poorer physical and mental health status (Cochran & Mays, 2007; Conron et al., 2010; Elliott et al., 2015). In contrast, studies show that college enrollment and graduation rates are higher among the queer community, either because young queer people believe college campuses are a good place to meet other LGBQT+ individuals, or because they view higher education as a means to avoid anticipated job-market discrimination (Black et al., 2002; Black et al., 2007).

Using field experiments as the one we employ, researchers have found that in the labor market gay and lesbian individuals receive significantly fewer callbacks than their heterosexual counterparts when they signal their sexual preferences in their resumés (Weichselbaumer, 2003; Badgett, 2007; Mishel, 2016). When applying for rental housing the evidence is mixed: some studies find that male gay couples receive fewer responses from landlord while lesbians receive no difference in treatment (Ahmed et al., 2008; Ahmed & Hammarstedt, 2009; Lauster & Easterbrook, 2011), while other studies conclude that landlords actually favor homosexual couples' applications (Murchie & Pang, 2018).

There is significantly less empirical evidence on the discrimination experiences of same-sex couples with children who are looking to invest in the human capital accumulation of their

offspring. Extant evidence, mostly based on small surveys, report on the barriers that gay couples face when trying to become fathers (Perrin et al., 2016; Perrin et al., 2019) and on their experiences with childcare and preschool settings (Matthews, 2020). These studies are based on convenience samples that may not be generalizable to the LGBQT+ population, focus on human capital investments before school, and are entirely performed in the context of developed countries.

Our study allow us to causally estimate the existence and extent of school discrimination against homosexual parents. With the notable exception of Diaz-Serrano and Meix-Llop (2016), no other study has focused on this issue, even though the number of same-sex couples with children is likely to increase thanks to the trend of expansion of rights for the LGBTQ+population in most countries. Our study differs from that of Díaz Serrano & Meix-Llop in a number of ways. First, we not only look at differences in response rate by schools but also on the type of response received, another important dimension that schools could use to discriminate against minority groups, and a metric that is missing from most correspondence studies (Bertrand & Duflo, 2017). Second, in our context private schools (and in particular religious schools) play a more relevant role in households' decisions regarding human capital investment. Finally our study has a national scope, rather than restricting to a single region of the country, giving it broader external validity.

The problem of discrimination by schools has only recently received attention by economists. Studies that focus on discrimination based on children's traits find that schools are less likely to respond to requests from parents if they signal that their child is low-performing or has special needs (Bergman & McFarlin Jr, 2020), and if the child has any sort of cognitive or medical condition (Ahmed et al., 2021). Two other correspondence studies analyze differences in school receptiveness of children based on the characteristics of the parents: Diaz-Serrano and Meix-Llop (2016) find that gay (but not lesbian) couples had a significantly lower return call probability than their heterosexual counterparts, while Díaz Serrano and Flamand (2020) find that schools are more likely to respond to requests from single parents (especially single mothers) than from traditional couples.

The rest of the paper is organized as follows: the next section provides an overview of LGBTQ+ rights in Colombia and recent trends in discrimination against this collective, as

well as a background on the school system of the country. Section 3 presents the experimental design, while section 4 details the empirical strategy we follow to estimate the effects of parents' sexual orientation on school responses. We present the results of this analysis in section 5, and finally section 6 concludes.

# 2 Background

#### 2.1 The LGBT community in Colombia and the legal system

According to the data from the latest population census, in Colombia there are almost 50 thousand same-sex households, which corresponds to 0.34% of all households in the country (DANE, 2022a). The majority of these households are located in the largest urban areas of the country, with Bogotá, Medellín, Cali and Cartagena showing the highest rates of same-sex couples per 1000 couples. Even though same-sex couples are less likely to have children than different sex couples (46.9% vs. 76.3%), the proportion of same-sex couples who have children is still considerable.

In terms of socioeconomic characteristics, individuals who identify as part of the LGBT community tend to be more educated than the rest of the population, have higher rates of labor force participation (71.8% vs. 65.4%), higher employment rates (60.2% vs. 56.9%), but also higher unemployment rates (16.2% compared to 13%) (DANE, 2022b). Among those who work, the incomes are higher for individuals of the LGBT collective than for non-LGBT persons, both at the average and at different points of the income distribution. This also implies that LGBT individuals are less likely to be poor based on their income.

The Colombian legal system includes several laws that protect the rights of LGBT households. First, under President Juan Manuel Santos, law 1482 banned discrimination based on sexual orientation in 2011.<sup>2</sup> Specifically, this law, in article 134 A, includes penal sanctions

<sup>&</sup>lt;sup>1</sup>Average income is 2.2 million Colombian Pesos (COP) per month for LGBT individuals, but only 1.4 million COP for non-LGBT persons. The 25th, 50th and 75th percentiles for LGBT individuals stand at 0.9, 1.2 and 2.2 million COP per month, while for non-LGBT persons the corresponding figures are 0.5, 1 and 1.4 million COP per month.

<sup>&</sup>lt;sup>2</sup>Prior to this law, being homosexual in Colombia was classified as a crime until 1981. The subsequent 1991 constitutional reform guarantees such as the right to equality, the constitutional principle of pluralism and the right to free development of personality.

for the obstruction or restriction of the full exercise of the rights of people in several minority communities (Mora Martínez, n.d.).

Second, in November of 2015, the Constitutional Court approved adoption without any restriction or limitation. The ruling resulted from a claim of unconstitutionality that provided evidence that homeless children lacked rights since they could not be adopted by homoparental households. Under this important ruling, the court stated that the type of family provided by the State to children to guarantee their well-being must not be mediated by the sexual orientation of the adopters. In other words, the well-being of children must prevail over the type of family.

Finally, in 2016 Colombia became the fourth country in South America to legalize samesex marriage, after Argentina, Brazil and Uruguay. Marriage became legal when the Constitutional Court issued a ruling for the legalization of same-sex marriage throughout its national territory.

Interestingly, the progressive legal framework protecting the LGBT+ community extends to peace agreement between the Revolutionary Armed Forces of Colombia (FARC) and national the government. In 2016, the Gender Subcommittee, which included a LGBT+ member, acknowledged that women and the LGBT+ community were disproportionately affected by the armed conflict and added specific gender provisions to the agreement. Among many important provisions, the agreement created a committee to investigate crimes against individuals working politics, with particular emphasis in crimes against women and the LGBT+ population. Additionally, quotas for these communities were set to increase the representation of these communities and measures were promoted non-stigmatization and reconciliation (Gómez & Ávila, 2021).

#### 2.2 Attitudes towards same-sex households

In spite of having one of the most robust legal frameworks in Latin America, activists argue that it does not fully protect them against discrimination. According to multiple NGOs including Colombia Diversa and Caribe Afirmativo, longstanding stereotypes and misinformation regarding gender identity and sexual orientation still persist (Bocanumeth, 2020). This harmful rhetoric has translated into violence and threats against the LGBT+ commu-

nity. In 2020, for example, the number of threats, homicides and police violence against the LGBTQ+ community reached record highs, while crime in the country decreased due to the pandemic-induced lockdowns (Colombia Diversa, 2021).

Given the divide between the rule of law and the persisting discrimination described by the activists, it is worth considering how the wider society perceived the LGBT households. The World Values Study includes a question on whether individuals like the idea of having homosexuals as neighbors. Approximately 25 percent of the surveyed Colombians declared that they would, placing the country in the middle position of Latin-American countries (Figure 1). Colombia's neighbours Ecuador, Venezuela and Peru display higher levels of dislike while Brazil, Argentina, Mexico and Chile report a lower intolerance to the homosexual couples.

Furthermore, when we consider the question of whether homosexual couples are as good as other couples, Colombia is among the countries with the lowest levels of agreement (Figure 2). About a third of the surveyed Colombian agree with this statement, which is only slightly higher than Ecuador and greater than Peru. The rest of the countries in the region report higher level of tolerance towards homosexual couples, with Brazil has the highest levels. This contrast with the mounting evidence showing that children raised by same-sex couples fare as well as those raised by heterosexual parents (Manning et al., 2014; Perrin et al., 2016).

The figures presented in this section provide evidence of what activists have expressed regarding the Colombians views towards LGBT households. The fact that only a third of Colombians consider that homosexual parents are as good as other parents or would have them as neighbours could indicate a differential treatment of homosexual and heterosexual couples by some school workers. More importantly, given the progressive legal framework, we expect that the results from the study will reflect the beliefs about homosexual couples in Colombia, rather than the result of discriminatory governmental policies against this group. If homosexual parents are not viewed equally to their heterosexual equivalents, school authorities might be more hesitant to admit a child from such households. A recent example of parents struggling to register their child was made public in school was made public (El Tiempo, 2022). A couple of gay parents reported that they were denied enrollment in seven schools.

#### 2.3 Education in Colombia

There are approximately 16 thousand schools in Colombia, out of which eight thousand (48%) are private schools. Similar to other developed and developing countries, average academic achievement in Colombian public schools is lower than in private schools and there is large heterogeneity within both the public and private sectors.

School is mandatory from the 1st to the 9th grade (also known as the basic education level). This level is divided in two cycles: 1st to 5th grades, and 6th to 9th grades. There are three other levels that are recommended but not mandatory. The initial level (*pre-jardin* and *jardin*), or daycare, starting with students as young as 3 months old and going up to 5 years old. The pre-school level, comprised of at least one grade - *Transicion*, the equivalent to Kindergarten in the US school system. Finally, the medium level, or high school, comprised of the 10th and 11th grades, at the end of which students receive a high school diploma.

The school year in Colombia runs in two calendars: Calendar A, from February to November, and Calendar B, from September to June. All public schools in Colombia follow Calendar A, and a group of private schools (7% of all private schools) follow calendar B. Calendar B schools have higher average achievement records than the rest of private schools and a higher share of them are bilingual and have a unique school session (as opposed to morning and afternoon sessions) (LEE, 2022).

In the public sector, enrollment and admission processes vary by school district. In general, families need to fill in online or physical enrollment forms, stating which school they want to enroll their children the following academic year. Although admission to a public school is guaranteed by law, admission to the specific public school of choice is subject to availability. The timing of admission and enrollment processes varies and can depend on the grade. Admission in initial and preschool level can start earlier, because slots are very scarce in these levels. But admission for the 1st grade (which is the grade of this experiment) is done at the same time than admission to other grades.

In the private sector, enrollment and admissions processes vary by school. Starting the admission process with a school visit is a common practice, and can be initiated by parents or by schools themselves. Visits can happen one on one or in group through an open-day for all prospective families. Depending on the school and city, waiting lists can be long for

the initial and pre-school level. However, beginning on 1st grade (which is the grade of this experiment) waiting lists decrease substantially on length or even disappear.

# 3 Experimental design

The first step in for our experiment was to obtain the list of all primary schools in Colombia from the Ministry of Education.<sup>3</sup> The dataset included information from each school such as whether it followed a February-November or a September-June calendar (called calendar A and B schools respectively), whether it was a bilingual school, if it was mixed-gender or boys- or girls-only, if it has handicapped students, and the name of the principal, from which we inferred their gender. We complemented this dataset with information about the average score in the standardized test for 3rd graders (the first standardize test students face), and whether the school was religious. Due to logistical constraints, we only kept the calendar B schools.

The following step was to determine the best way to contact each school: using their own contact form or by e-mail. A detailed description of the protocol used to determine the most appropriate method to contact each school can be found in Appendix A. We ended with a list of 584 schools.

Figure 3 shows the distribution of schools in our sample by Department (*Departamento*, the first administrative division of Colombia). All calendar B schools are located in the west of the country, where the majority of the population lives.<sup>4</sup>. More than half of the schools are located in Cali (Departament of *Valle del Cauca*), the third largest city of Colombia, followed by Bogotá and its suburbs (Cundinamarca). Despite the relatively small number of schools in our sample, we are able to cover half of the Departments of the country, where 80% of the population lives.

To contact each school, we created six fictitious message senders: three male and three female. We also created fictitious names for their children. Following Diaz-Serrano and Meix-Llop (2016), we always chose female names for the children to reduce experimental

<sup>&</sup>lt;sup>3</sup>The data can be obtained from https://sineb.mineducacion.gov.co/bcol/app

<sup>&</sup>lt;sup>4</sup>The Departments on the east, where no calendar B schools exist, have fewer than 500,000 inhabitants each, and some have less than 200,000 inhabitants, in a country of almost 50 million people.

costs (the only exceptions being male-only schools that comprise less than 2% of the sample) For four of these senders we created a fictitious spouse to convey information about the sexual orientation of the couple: gay, lesbian, and heterosexual (one for a male sender and one for a female sender). In all cases, first and last names were selected from the list of most common first and last names reported by the National Civil Registry (Registraduría Nacional del Estado Civil) of Colombia. This was done so that names would sound familiar in all parts of the country where we would send the requests. All first and last names were different for each couple.

For each sender we created an e-mail account using the same provider (Gmail) with addresses that follow the pattern "initiallastnamedate@gmail.com". Also for each sender, we bought a cellphone line to include in the messages to increase their credibility.

Between the months of February and April 2022 we contacted schools via the contact method that we had identified as the most appropriate. Regardless of the best method of contact, the message sent was always the same: the sender was looking for a school for their child to start first grade the following academic year, they had received good references of the school and hence wanted to visit it. Appendix B shows examples of the messages sent.

All messages were written in first person plural to convey the idea that it was a couple (and not only one parent) that was making the request. For the explicitly homosexual and heterosexual couples, the sender mentions that s/he and her/his spouse are looking for a school for their child, and both of them sign the message. In the case of the two remaining senders, the request is written in first person plural to convey the idea that is a couple that is sending the request, but only the name of the sender is mentioned.<sup>5</sup> We did this to test whether homosexual parents could pass the first school filter by not revealing their sexual orientation in case we found discrimination against same-sex couples.

Each school received two requests: one from an explicitly homosexual couple and one from either an explicitly heterosexual couple or a couple that did not disclose their sexual orientation. We randomized schools into four treatment arms depending on the gender of the sender and the type of couple that would send the second request, besides the same-sex couple.<sup>6</sup> Table 1 presents balance test across groups for each school covariate. We achieve

<sup>&</sup>lt;sup>5</sup>In Spanish, there is no gender-neutral word equivalent to "spouse".

<sup>&</sup>lt;sup>6</sup>We contacted schools from a parent who does not mention the name of their spouse only in the two

balance in most covariates, with the notable exception of the number of schools for which test scores are missing, which is lower for two of our treatment arms.

We tracked whether the school replied our inquiry (either by e-mail, phone or WhatsApp) and the time between the request was sent and the school first replied. In addition, for each response we received by e-mail we asked two undergraduate students from Universidad EAFIT to individually and independently grade the reply based on whether they agree to a visit, the information provided and the general tone of the response. The specific dimensions used to grade the reply can be found in Appendix C. We never replied any e-mail or answer any phone call to reduce the burden on schools and the risk of contaminating the study.

# 4 Empirical strategy

Since schools within each *Departamento* were randomly assigned to each of the four groups we created, we can estimate the differential effect of receiving a request from a specific couple using ordinary least squares (OLS) estimators. Specifically, throughout this paper we will estimate equations of the form:

$$Y_{jd} = \beta_0 + \beta_1 \times Homosexual_j + \beta_2 \times No\_info_j + \Gamma X_j + \mu_j + \varepsilon_{jd}$$
 (1)

Where  $Y_jd$  is the outcome of interest for school j in Departmento d, Homosexual<sub>j</sub> is a dummy variable that takes the value of one if the school received a request from a homosexual couple and  $No\_info_j$  is an indicator that takes the value of one if the school received an e-mail from a couple from which the sexual orientation was not disclosed. Hence, the coefficients  $\beta_1$  and  $\beta_2$  reflect the difference in the outcome of interest between a request sent by a heterosexual couple and a same-sex or undetermined couple, respectively.

Our outcomes of interest are an indicator that takes the value of one if the school replied to the request, the time (in days) the school took to reply, conditional on replying, and a "reply score", which includes things such as whether the school agreed to a visit, if they proposed a date to visit, if the school addressed both parents in their reply, the general tone of the response, etc. These metrics were determined by two undergraduate students who, Departments with the most schools (Bogotá DC and Valle del Cauca).

individually and independently, graded each reply.

We include a set of school controls for whether the school also offers basic secondary and high school levels, if the school is in a rural or urban area, the type of education offered by the school, if offers bilingual education, if it has handicapped students, the gender of the principal, whether they offer religious education, and the latest available average score in standardized third-grade tests. In some specifications, we drop the school controls and instead include school fixed effects  $\mu_j$ . In all our specifications, we cluster the standard errors at the school level.

We present results for the whole sample of schools, and also separately for those contacted by male and female parents to analyze heterogeneous effects by gender of the sender.

#### 5 Results

Out of the 584 schools in our sample, only 512 offered first grade and had some sort of contact information that we could use (either e-mail or contact form on their website). Of these 512, we were able to contact 481 schools.<sup>7</sup> Table 2 presents summary statistics for this group of schools. All calendar B schools are private schools. The majority (about 75%) offer both primary, basic secondary and secondary school. Also, most schools (about 94%) are mixed-gender, with only 4% admitting only girls and 2% only boys. Forty percent of schools are bilingual, in most cases with English as a second language. Bilingual schools are generally more expensive and selective than the average private school.

We tried to contact each school twice, one by a same-sex couple and one from either an opposite-sex or undetermined couple. However, there are 13 schools that we only managed to contact once, either because their mailbox was full when we tried to contact them for the second time. We nevertheless include these schools in all our analysis with the exception of regressions that include school fixed effects.

Table 3 shows the raw response rates from the schools we contacted, by sexual orientation of the couple and gender of the request writer. Heterosexual couples received a reply from

<sup>&</sup>lt;sup>7</sup>We were not able to reach certain schools using the method of contact provided by them. In addition, during our experiment we realized that a number of schools were part of the same system and thus had a centralized contact e-mail, so we stopped contacting them.

schools for 53% of the requests sent, with a somewhat higher response rate when the writer was a woman as opposed to a man (57% vs. 50%). This figure is in line with previous correspondence studies involving schools (Diaz-Serrano and Meix-Llop, 2016; Bergman and McFarlin Jr, 2020; Ahmed et al., 2021). On the other hand, only 43% of requests sent by homosexual couples were replied, and the response rate was the same across gender of the request writer. Finally, when we only included the name of one parent in the request, giving no information about the sexual orientation of the couple, the response rate dropped to 37%, and the difference between the response rate for requests sent by women and men is almost 20 percentage points (46% vs. 28%).

In Table 4, we look at the behavior of schools in terms of which requests they replied. Overall, 40% of schools did not respond to any of the requests we sent, while 30% replied to both requests (the one sent by an homosexual couple and the one sent by either an explicitly heterosexual couple or a couple that did not disclose its sexual orientation). However we can already observe large differences in response rates based on the gender of the person sending the request: when the request sender was a male only 24% of schools replied to both requests, but when requests were sent by women, 35% of schools replied to both requests sent.

On the other hand, 13% of schools replied only to the request sent by a homosexual couple (19% if the request was sent by men and only 7% when requests were sent by women), and 22% of schools replied only to the request sent by an explicitly heterosexual couple when this was the comparison group used. Instead, when schools received a request from a homosexual couple and from a couple whose sexual orientation could not be determined, 10% of the schools replied only to the latter.

# 5.1 Econometric analysis of response rates

Table 5 shows the results of regressing an indicator that takes the value of one if the school replied to the request to visit on indicators for the sexual orientation of the parents conveyed by the gender of the names included: either same-sex couples or undisclosed (only the name of one parent was included). The base group are heterosexual couples. Both male and female request-writers are included in these results.

When neither school controls nor school fixed effects are included (column 1), same-sex

couples are 8.4 percentage points less likely than homosexual ones to receive a response from the schools. Considering that the latter received a response rate of 53.7%, this corresponds to a difference of 15.6%. When the sexual orientation of the parents is not disclosed, the response rate is 10.5 pp. (19.6%) lower than that received by explicitly heterosexual couples.

Including school controls (column 2) does not change the results qualitatively, although the effect size increases to 18.7% and 25.3% in the case of homosexual and undisclosed sexual orientation couples, respectively. While this may be due to the reduction in sample size (we do not have test scores nor information about religious education for all schools), replacing school controls by school fixed effects (column 3) reveals that, within school, same-sex couples are 12pp. (22.3%) less likely than heterosexual couples to receive a response to a request to visit. Moreover, when the sexual orientation of the couple is not disclosed, schools are 20.1pp. (37.4%) less likely to reply than if the message is sent by an explicitly heterosexual couple.

In Table 6, we show the effect of sexual orientation of the parents on the likelihood that a school responds to the request to visit, separately for male and female senders. Here, we only use the specifications that include school fixed effects.

The difference in response rates between same-sex and different-sex parents is moderately lower for male than female senders at 10.3pp. (20.4%) and 13.8pp. (24%), respectively. However, we cannot reject the null hypothesis that the differences are equivalent. These results differ from those of Diaz-Serrano and Meix-Llop (2016), who find that gay couples are significantly less likely than heterosexual ones to receive a callback, but the same is not true for lesbian vs. heterosexual couples. The difference may lie in the more conservative nature of the Colombian society towards the LGBTQ+ community.

Nevertheless, the largest difference across gender comes from couples that do not provide any information about their sexual orientation. On the one hand, when the sender is a woman, those mentioning only their names in the request receive an insignificant 8.3pp. (14.5%) lower response rate than explicitly heterosexual couples. On the other hand, when a man sends the request without giving out the gender of the other parent, they receive a response rate 31.6pp. (62.8%) lower than heterosexual couples. In this case, the difference is statistically different from zero and it is also significantly different from the coefficient for

homosexual couples.

There are various possible reasons for the behavior we observe from schools when it comes to couples that do not disclose their sexual orientation. One possibility is that, if schools exert effort to tailor each visit to the characteristics of the family, not disclosing the sexual orientation of the parents could entail a higher cost for the school to prepare that visit. In that case, schools may prefer not to reply if the cost of preparing the visit for parents who send that type of requests is higher than the expected benefit (in terms of the tuition they may get). If that were the case, we would expect a similar behavior regardless of the gender of the request sender, and schools that reply to these e-mails to be more likely to ask for additional information about the parents than when they reply to requests from other couples. However, we do not find this to be the case.

A second option is that schools could make different inferences about the type of household sending these requests based on the gender of the sender. Because in Colombia women are usually in charge of following up on children's education, schools may consider requests from male writers as likely to come from a single-parent household. There is evidence of discrimination against single parents in the housing market (Murchie & Pang, 2018), but the only study that looks at school discrimination against single parents (Díaz Serrano & Flamand, 2020) does not find evidence of this. While we cannot discard this possibility, our requests were always written in plural. Moreover, it is at least surprising to find such differences in response rates among male senders.

A more likely explanation for our findings is a combination between the inference about the sexual orientation of the couple that schools make based on the gender of the parent who sends the request (due to social norms), and changes in the cost of not responding based on the information conveyed by the message. Schools may infer that a request sent by a man who does not disclose the name of his spouse is more likely to be from a gay couple than a similar message sent by a woman. In addition to that, schools may find it "costlier" to ignore a message sent by an explicitly homosexual couple than one in which there is ambiguity in their sexual orientation (e.g., because discrimination may be more salient in the first situation than in the latter). In fact, (Kirgios et al., 2022) find that when asking for help, people who explicitly signal their belonging to a minority group are more likely to receive a response

than those whose belonging can be inferred but is not made explicit.

### 5.2 Which type of schools are more likely to discriminate?

As we mentioned in section 3, we have a rich set of school characteristics in our database. We can use some of this characteristics to dive deeper into the type of schools that are more likely to discriminate against same-sex or undetermined couples. This in turn can give some insights about the origin of discrimination (i.e. taste-based or statistical), despite the fact that our study was not explicitly designed to determine this.

First, we look at the difference in replies by school quality. We proxy school quality by the average score in the standardized third grade test. We split the sample of schools in half, considering "low quality" those whose average score is below the median and "high quality" those for which the average sore is above the median. The results are presented in Table D1.

Both low- and high-quality schools have a lower response rate to requests when the parents who send it are homosexual or their sexual orientation is not disclosed. However, the point estimate for low-quality schools is more than twice as large in magnitude as that we observe among high-quality schools.

According to our estimates, schools that do better in standardized tests have a 14.5% lower probability to reply to a request sent by a homosexual couple than one sent from an heterosexual one, and a 27% lower probability of replying if the sexual orientation of the couple is not disclosed. Both estimates are only marginally significant. In contrast the effect sizes for low-quality schools are 35.7% and 54.8% for homosexual and undetermined couples, respectively. Low scores in standardized tests may be indicative of a bad administration from the school (for example, failure to attract and retain good teachers). Lower response rates to nontraditional couples may thus be a consequence of these management issues.

In addition, if school quality is correlated with costs, this means that vulnerable non-traditional families would be affected the most by school discrimination, further widening the inequality of opportunity that already exists in the country. We can indirectly check if this is the case since we have data on the average socio-economic status of the students who attend the school. When taking standardized tests, students are asked a series of questions about their household that are used to classify schools into five categories based on the

average SES of the students. To increase statistical power, we divide schools depending on whether students are of "low-" (categories one through three) or "high-SES" (categories four and five).

We present the results in Table D2. Schools with more affluent students are about 15 percentage points more likely to respond to requests from heterosexual couples than those of lower SES (0.63 vs. 0.47). This could be a consequence of the former having more resources and putting more effort in attracting students. In absolute terms both groups of schools have a similarly lower response rate to requests from same-sex couples as opposed to heterosexual ones (the point estimates are -.133 and -158, respectively, both statistically different from zero). However, with respect to the response rate among heterosexual couples, the effect size is larger for schools of low SES (33% vs. 21% among high-SES schools), a pattern that persists when we look separately at male and female senders. This finding implies that economically vulnerable homosexual parents would be affected the most by school discrimination, further widening the inequality of opportunity that already exists in the country.

On the other hand, schools with high-SES students are 28.5pp. less likely to reply when a request is sent by a couple whose sexual orientation is undisclosed as opposed to an explicitly heterosexual couple (a 45% decrease, significant at the 1% level), while the corresponding figure in low-SES schools is 13.7pp. and it is not statistically significant. In both cases, the results are mainly driven by lack of responses to male senders.

The fact that high-SES schools are more likely to ignore requests sent by parents whose sexual orientation is ambiguous than homosexual parents, while the opposite is observed among low-SES schools could give additional support to the hypothesis that schools are more likely to discriminate when that behavior is less salient. Schools with more affluent students may charge higher tuition, and thus have more resources for management, including replying requests like the ones we sent. This could result in schools of high-SES students being more capable of determining the consequences of ignoring requests based on the characteristics of the parents.

We also look at differential response rates depending on whether the school is religious. Even though there are no public statistics about the share of religious schools in Colombia, we have information about the classes being taught in most schools, and in other cases we can infer whether they are religious by their name or looking at their website. Using these pieces of information, we observe that most private schools in our sample (86%) are religious, either because they are either Parrish schools or part of a congregation, or because they include religion in their curriculum.

The results are presented in Table D3. Discrimination against non-traditional couples is concentrated among religious schools. Homosexual couples are 22.6% less likely to receive a response to a request to visit than heterosexual couples, and in the case of couples for whom sexual orientation is not conveyed in the request, the response rate from religious schools is 39.7% lower than for heterosexual couples. For secular schools, point estimates are also negative but their size is about half that of religious schools and they are not statistically different from zero (although we may be underpowered to detect an effect). As with school quality, these differences are particularly concerning, because they restrict the type of schools that parents can choose for their children.

Finally, in Table D4 we look at differences in response rates by gender of the school principal. Once again, we observe higher response rates to requests sent by heterosexual couples than for any other type of couple regardless of the gender of the principal. However, homosexual couples are 11.9% less likely to receive a response when the school is headed by a woman, while the difference increases to 38% when the principal is a man. In the case of couples for which the sexual orientation cannot be determined from the request, the reduction in response rates amounts to 31.7% for female-led schools, but increases to 46% when the principal is male. Schools headed by a man are also more less likely to reply to requests sent from nontraditional couples regardless of the gender of the person sending the inquiry, while in the case of female-headed schools, only requests sent by openly homosexual men or men who do not disclose the gender of their spouse receive lower response rates.

This result is in line with research in other areas showing that men are more likely to discriminate than women. Boring (2017) and Mengel et al. (2019), and more recently Ayllón (2022) find that, ceteris paribus, male students tend to evaluate female professors more harshly than female students. De Paola and Scoppa (2015) find that when promotion committees are composed exclusively by men, female professors have a lower likelihood of being promoted, an effect that disappears when the committee is composed of professors of

both genders. Finally, Egan et al. (2022) find that women are more severely punished for misconduct than men, but this difference disappears when firms have a larger percentage of female managers and executives. In our setting, even though principals are not directly responsible for replying to requests or general inquiries from parents, they may set directives for how their schools should handle requests from different parents.

#### 5.3 Response time

In Table 7 we show the estimates of the time (in days) it took for schools to reply to our requests, conditional on replying. The difference between the time schools take to reply to requests sent by homosexual parents, or those who do not disclose their sexual orientation is negative, but small and statistically insignificant when we do not include school fixed effects. However, the point estimates become positive and large (although still statistically not different from zero) when we include school fixed effects and thus focus on schools that replied to the requests sent by both couples (column 3). Even though we cannot rule out large differences in response rates between heterosexual and other types of couples, which may indicate that the effects we observe in columns 1 and 2 are due to selection into replying.

To study whether there are differences beyond the average time to respond, in Figure 4 we plot the empirical distribution of response time (in days) by sexual orientation of the couple that sent the request. We observe that the distributions are similar across groups, and the Kolmogorov-Smirnov test between any two groups fails to reject the null hypothesis that the distributions are different.

Nevertheless, when we split the sample by gender of the request sender (Table 8), we observe that schools take about two days longer (139% more) to reply a request from a gay couple or a man who does not disclose the sex of his spouse. Although the difference is not statistically significant, this may be due to the small sample size. In contrast, we do not observe any statistically or economically significant difference in the time taken to reply to request sent by women, regardless of their sexual orientation.

#### 5.4 Response quality

While schools may reply to requests from parents regardless of their sexual orientation, the type of response they give may differ. For example, schools may want to give or ask for more information from certain parents, or they may want to turn down certain parents by saying that they do not have vacancies. To test this, we asked two undergraduate students to independently grade the response of schools that replied by e-mail along several objective and subjective dimensions. Table 9 reports the difference in grades received by sexual orientation of the couple. We standardized the overall grade with respect to the mean and standard deviation of the responses to requests by heterosexual couples.

We do not observe any statistically significant difference in the quality of replies received by either couple. We find similar results when we split the sample by gender of the writer (Table 10), although point estimates are larger for male writers than they are for female writers. In both cases, the coefficient for homosexual is positive, indicating a more favorable reply by the school, while the coefficient for couples who do not convey their sexual orientation is negative.

In Table E1, we look separately at objective and subjective measures of the response quality for all senders, and separately for male and female senders. We do not find significant differences in either type of metric, although there is some evidence that homosexual senders (especially men) receive better replies in terms of our objective metrics, while couples who do not disclose their sexual orientation tend to receive a lower score.

To avoid any bias stemming from grading, and as an additional check, we counted the number of words in the responses sent by schools.<sup>8</sup> The reasoning behind this is that a more favorable response by schools would likely involve a more elaborate answer with more words. The results are presented in Table E2. Once again, we do not find differences in the number of words used by schools by sexual orientation of the parents, although we observe differences by gender of the writer. Responses received by men both explicitly homosexual and when they keep their sexual orientation undisclosed have fewer words than those received by explicitly heterosexual men, while the opposite is true among female writers.

In summary, we cannot reject the null hypothesis that responses are similar across all

<sup>&</sup>lt;sup>8</sup>This analysis was not included in the pre-analysis plan.

three types of couples, conditional on receiving a reply. This, together with the analysis regarding the response type (where we also find no statistically significant differences across groups), may be a consequence of selection into replying: schools that treat nontraditional couples differently from heterosexual parents simply decide not to reply to their requests, instead of giving a different reply to different types of parents.

#### 6 Conclusion

Despite progress made in the last decade in Latin America to strengthen the rights and protect LGBTQ+ individuals, discrimination against this collective remains pervasive. Discrimination by schools against same-sex couples is particularly concerning because, even though it is directed to parents, it ultimately affects their children and can have long-lasting consequences for them. If parents are constrained in terms of the schools they can enroll their children, they may have to register them in a school that does not align well with their preferences in terms of educational investment (affecting the human capital accumulation of their children and their future wages) or may require them to make remedial investments that take additional time and/or money.

In this paper, we measure the extent of school discrimination against same-sex couples in Colombia using a correspondence study. We sent requests to visit private primary schools in the country to register a first grader. The requests differed only in the number of parent names we included (one or two), and the gender of the parents to convey their sexual orientation.

Our results suggest that schools are significantly less likely to reply to request sent by both same-sex couples and couples that do not disclose their sexual orientation. This last result is driven by non-response to requests sent by men, which suggests that when parents do not disclose their sexual orientation, schools make different inferences about it based on the gender of the person sending the request. In addition to that, schools may consider discrimination to be more salient if they ignore a request from an explicitly homosexual couple than one coming from a couple whose sexual orientation is ambiguous.

On the other hand, conditional on replying to a request, we do not find any difference in the time schools take to reply or the quality of the response. This is most likely due to "selection into replying", whereby schools that choose to respond to our requests have different attitudes towards same-sex couples than those that do not reply. This implies that the relevant dimension of school discrimination is the extensive margin (whether schools decide to engage with nontraditional couples).

One caveat, as with most correspondent studies, is that we cannot in principle determine whether our findings reflect taste-based or statistical discrimination (Heckman & Siegelman, 1993; Heckman, 1998). If schools associate same-sex couples with undesirable characteristics, or if variance of certain characteristics is larger for same-sex than opposite-sex couples, then it may be rational for them to respond at higher rates to requests sent from the latter. However, the evidence presented in section 2.1 suggest that, if anything, same-sex couples are on average better educated and have higher income than opposite-sex ones. While these may not be the only factors that schools consider to determine admission, they are probably some of the most important.

An additional limitation of this study is that we cannot distinguish between a systematic preference of schools for certain couples. It is possible that the difference in response rates simply reflects the preferences of the individual decision of the person who received the request, even though the school itself would not discriminate if a same-sex couple filed a formal request to register a child. While the anecdotal evidence presented in section 2.2 does not support this hypothesis, further research should be devoted to determine the root causes of the results we observe.

Similarly, even if discrimination against non-traditional couples was part of a policy from the school, it is unclear whether it stems from their own preferences or those of other parents. School officials may fear that by allowing students from same-sex parents, other parents may withdraw their children from the school, hence resulting in a loss of revenue.

Recent studies have used vignette experiments involving job recruiters have shed light into the mechanisms behind employers discrimination against women (Van Borm & Baert, 2022), older candidates (Van Borm et al., 2021), and individuals participating in public activation programs (Van Belle et al., 2019). In a similar vein, to shed light on the reasons behind the difference in response rates from schools to our requests, future research could perform similar experiments involving school authorities. As opposed to those performed with human

resource professionals, these would have to be carefully designed to avoid Hawthorne effects.

Notwithstanding the caveats mentioned above, taking our findings at face value governments should put greater effort to enforce the laws and guarantee the rights of the LGBTQ+ community. For example, in Colombia there are laws that regulate how public and private entities have to reply to formal requests and complaints from any citizen. Policymakers and government officials could make sure that all schools comply with these regulations. Schools could also incentivize schools to enroll children of same-sex couples, and/or compel schools to make their enrollment process more transparent, relying less on information about the parents and on individual inquiries.

<sup>&</sup>lt;sup>9</sup>Law 1755 of 2015.

#### References

- Ahmed, A., Hammarstedt, M., & Karlsson, K. (2021). Do schools discriminate against children with disabilities? a field experiment in Sweden. *Education Economics*, 29(1), 3–16.
- Ahmed, A. M., Andersson, L., & Hammarstedt, M. (2008). Are lesbians discriminated against in the rental housing market? evidence from a correspondence testing experiment.

  \*Journal of Housing Economics, 17(3), 234–238.
- Ahmed, A. M., & Hammarstedt, M. (2009). Detecting discrimination against homosexuals: Evidence from a field experiment on the internet. *Economica*, 76 (303), 588–597.
- Antecol, H., Jong, A., & Steinberger, M. (2008). The sexual orientation wage gap: The role of occupational sorting and human capital. *ILR Review*, 61(4), 518–543.
- Ayllón, S. (2022). Online teaching and gender bias. *Economics of Education Review*, 89, 102280.
- Badgett, M. L. (2007). Discrimination based on sexual orientation: A review of the literature in economics and beyond. *Sexual orientation discrimination*, 37–61.
- Bergman, P., & McFarlin Jr, I. (2020). Education for all? a nationwide audit study of school choice.
- Bertrand, M., & Duflo, E. (2017). Field experiments on discrimination. *Handbook of economic field experiments*, 1, 309–393.
- Black, D., Gates, G., Sanders, S., & Taylor, L. (2002). Why do gay men live in san francisco?

  Journal of Urban Economics, 51(1), 54–76.
- Black, D. A., Makar, H. R., Sanders, S. G., & Taylor, L. J. (2003). The earnings effects of sexual orientation. *ILR Review*, 56(3), 449–469.
- Black, D. A., Sanders, S. G., & Taylor, L. J. (2007). The economics of lesbian and gay families. *Journal of economic perspectives*, 21(2), 53–70.
- Bocanumeth, M. (2020). LGBT+ rights and peace in Colombia: The paradox between law and practice. for Washington Office for Latin America (WOLA).
- Boring, A. (2017). Gender biases in student evaluations of teaching. *Journal of public economics*, 145, 27–41.

- Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W., & Yagan, D. (2011). How does your kindergarten classroom affect your earnings? evidence from project star. *The Quarterly journal of economics*, 126(4), 1593–1660.
- Chetty, R., Hendren, N., & Katz, L. F. (2016). The effects of exposure to better neighborhoods on children: New evidence from the moving to opportunity experiment. *American Economic Review*, 106(4), 855–902.
- Clain, S. H., & Leppel, K. (2001). An investigation into sexual orientation discrimination as an explanation for wage differences. *Applied economics*, 33(1), 37–47.
- Cochran, S. D., & Mays, V. M. (2007). Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: Results from the california quality of life survey. *American journal of public health*, 97(11), 2048–2055.
- Colombia Diversa. (2021). Nothing to celebrate: 2020, the year with the highest levels of police violence, homicides and threats against LGBT people (tech. rep.).
- Conron, K. J., Mimiaga, M. J., & Landers, S. J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American journal of public health*, 100(10), 1953–1960.
- Conti, G., Heckman, J. J., & Pinto, R. (2016). The effects of two influential early childhood interventions on health and healthy behaviour. *The Economic Journal*, 126 (596), F28–F65.
- DANE. (2022a). Caracterización demográfica y socioeconómica de los hogares de parejas del mismo sexo en colombia (Boletín Técnico).
- DANE. (2022b). Mercado laboral de la población LGBT Año móvil abril 21 marzo 22 (Boletín Técnico).
- De Paola, M., & Scoppa, V. (2015). Gender discrimination and evaluators' gender: Evidence from italian academia. *Economica*, 82(325), 162–188.
- Díaz Serrano, L., & Flamand, S. (2020). Do schools discriminate against single parents? evidence from a randomized correspondence experiment (tech. rep.). Universitat Rovira i Virgili, Department of Economics.

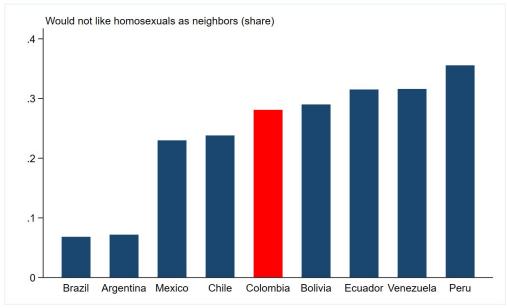
- Diaz-Serrano, L., & Meix-Llop, E. (2016). Do schools discriminate against homosexual parents? Evidence from a randomized correspondence experiment. *Economics of Education Review*, 53, 133–142.
- Drydakis, N. (2009). Sexual orientation discrimination in the labour market. *Labour Economics*, 16(4), 364–372.
- Egan, M., Matvos, G., & Seru, A. (2022). When harry fired sally: The double standard in punishing misconduct. *Journal of Political Economy*, 130(5), 1184–1248. https://doi.org/10.1086/718964
- El Tiempo. (2022). Colegio en Bogotá no habría recibido a una niña por tener papás gays. *El Tiempo*. Retrieved May 22, 2022, from https://www.eltiempo.com/vida/educacion/colegio-en-bogota-no-habria-recibido-a-una-nina-por-tener-papas-gays-656539
- Elliott, M. N., Kanouse, D. E., Burkhart, Q., Abel, G. A., Lyratzopoulos, G., Beckett, M. K., Schuster, M. A., & Roland, M. (2015). Sexual minorities in england have poorer health and worse health care experiences: A national survey. *Journal of general internal medicine*, 30(1), 9–16.
- Encarnación, O. G. (2016). Out in the periphery: Latin america's gay rights revolution. Oxford University Press.
- Gómez, O. L. C., & Ávila, A. M. S. (2021). Reflexiones sobre los retos y oportunidades del acuerdo de paz (ap) colombiano. una mirada inicial desde la perspectiva de género sobre lo pactado y lo implementado. *Revista En-contexto*, 9(14), 225–252.
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos,
  M., Norris, P., Ponarin, E., & Puranen, B. (2022). World values survey: Round seven
  country-pooled datafile version 4.0.
- Heckman, J. J. (1998). Detecting discrimination. *Journal of economic perspectives*, 12(2), 101–116.
- Heckman, J. J., & Siegelman, P. (1993). The urban institute audit studies: Their methods and findings. Clear and convincing evidence: Measurement of discrimination in America, 187–258.

- Kirgios, E. L., Rai, A., Chang, E. H., & Milkman, K. L. (2022). When seeking help, women and racial/ethnic minorities benefit from explicitly stating their identity. *Nature Human Behaviour*, 6(3), 383–391.
- Klawitter, M. (2015). Meta-analysis of the effects of sexual orientation on earnings. *Industrial Relations: A Journal of Economy and Society*, 54(1), 4–32.
- Lauster, N., & Easterbrook, A. (2011). No room for new families? a field experiment measuring rental discrimination against same-sex couples and single parents. *Social Problems*, 58(3), 389–409.
- LEE. (2022). Informe de caracterización y diagnóstico de colegios privados de Bogotá (tech. rep.). Laboratorio de Economía de la Educación, Pontificia Universidad Javeriana.
- Manning, W. D., Fettro, M. N., & Lamidi, E. (2014). Child well-being in same-sex parent families: Review of research prepared for american sociological association amicus brief. *Population research and policy review*, 33(4), 485–502.
- Matthews, T. J. (2020). "why isn't it the same as any other family?": Understanding emergent family narratives and early education experiences among lgbtq+ parents (Doctoral dissertation). Harvard University.
- Mengel, F., Sauermann, J., & Zölitz, U. (2019). Gender bias in teaching evaluations. *Journal* of the European economic association, 17(2), 535–566.
- Mishel, E. (2016). Discrimination against queer women in the us workforce: A résumé audit study. *Socius*, 2, 2378023115621316.
- Mora Martínez, B. (n.d.). La corte constitucional y las familias de parejas del mismo sexo en Colombia.
- Murchie, J., & Pang, J. (2018). Rental housing discrimination across protected classes: Evidence from a randomized experiment. *Regional Science and Urban Economics*, 73, 170–179.
- Perrin, E. C., Hurley, S. M., Mattern, K., Flavin, L., & Pinderhughes, E. E. (2019). Barriers and stigma experienced by gay fathers and their children. *Pediatrics*, 143(2).
- Perrin, E. C., Pinderhughes, E. E., Mattern, K., Hurley, S. M., & Newman, R. A. (2016). Experiences of children with gay fathers. *Clinical Pediatrics*, 55(14), 1305–1317.

- Tilcsik, A. (2011). Pride and prejudice: Employment discrimination against openly gay men in the united states. *American Journal of Sociology*, 117(2), 586–626.
- Van Belle, E., Caers, R., De Couck, M., Di Stasio, V., & Baert, S. (2019). The signal of applying for a job under a vacancy referral scheme. *Industrial Relations: A Journal of Economy and Society*, 58(2), 251–274.
- Van Borm, H., & Baert, S. (2022). Diving in the minds of recruiters: What triggers gender stereotypes in hiring?
- Van Borm, H., Burn, I., & Baert, S. (2021). What does a job candidate's age signal to employers? *Labour Economics*, 71, 102003.
- Weichselbaumer, D. (2003). Sexual orientation discrimination in hiring. Labour economics, 10(6), 629-642.
- World Bank. (2022). School enrollment, primary, private (% of total primary) [data retrieved from World Development Indicators, https://data.worldbank.org/indicator/SE.PRM. PRIV.ZS].

# Figures and Tables

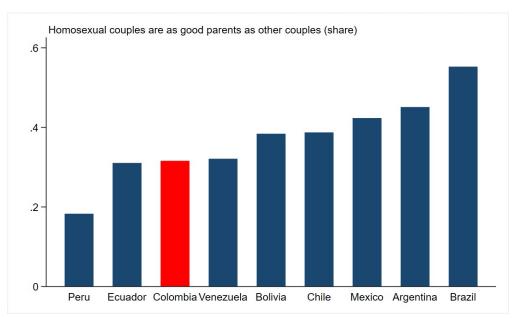
Figure 1: Do not like homosexuals as neighbors



Note: 1. Yes; 0. No

Source: Own elaboration from World Values Survey

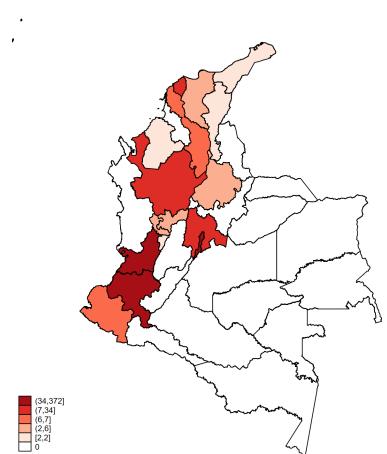
Figure 2: Homosexual couples are as good as other couples



Note: 1. Yes; 0. No

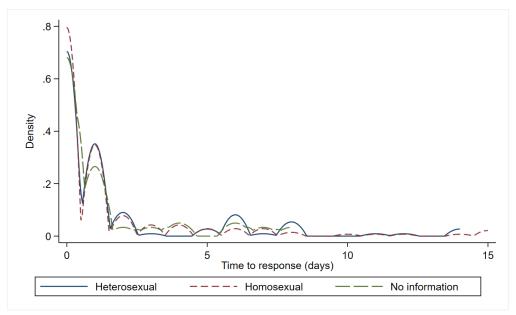
Source: Own elaboration from World Values Survey

Figure 3: Distribution of schools by Departamento



 $Note: \ The \ Figure \ shows \ the \ number \ of \ schools \ in \ our \ sample \ by \ Departamento, \ the \ first \ administrative \ division \ of \ Colombia.$ 

Figure 4: Empirical density function of response time, by sexual orientation of request sender



Note: The Figure shows the empirical distribution of the time (in days) taken by schools to reply to the request sent to visit (conditional on replying), by the sexual orientation of the couple that sent the request. Values are winsorized at the top 1%. Heterosexual refers to different-sex couples conveyed by the names of the parents. Homosexual refers to same-sex couples conveyed by the names of the parents. No information refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural.

Table 1: School covariates balance

|                              | (1)<br>Heterosexual couple | (2)<br>Undisclosed orientation | (3)<br>Undisclosed orientation | (4)      |
|------------------------------|----------------------------|--------------------------------|--------------------------------|----------|
|                              | (female sender)            | (male sender)                  | (female sender)                | Constant |
| Centro educativo             | -0.061                     | -0.064                         | 0.007                          | 0.349*** |
|                              | (0.047)                    | (0.057)                        | (0.056)                        | (0.033)  |
| Boys-only                    | -0.003                     | -0.006                         | 0.018                          | 0.017*   |
|                              | (0.014)                    | (0.017)                        | (0.017)                        | (0.010)  |
| Girls-only                   | 0.021                      | 0.029                          | 0.033                          | 0.020    |
|                              | (0.020)                    | (0.025)                        | (0.024)                        | (0.014)  |
| Mixed gender                 | -0.018                     | -0.022                         | -0.050*                        | 0.963*** |
|                              | (0.024)                    | (0.029)                        | (0.029)                        | (0.017)  |
| Urban area                   | 0.018                      | -0.030                         | -0.048                         | 0.877*** |
|                              | (0.028)                    | (0.034)                        | (0.034)                        | (0.020)  |
| Traditional education        | 0.018                      | 0.041                          | 0.021                          | 0.928*** |
|                              | (0.024)                    | (0.029)                        | (0.029)                        | (0.017)  |
| Handicapped students         | -0.046                     | -0.093*                        | -0.031                         | 0.271*** |
|                              | (0.045)                    | (0.054)                        | (0.053)                        | (0.031)  |
| Bilingual                    | 0.068                      | $0.075^{'}$                    | 0.050                          | 0.319*** |
|                              | (0.047)                    | (0.057)                        | (0.056)                        | (0.033)  |
| Branches                     | -0.064                     | -0.087                         | -0.063                         | 1.073*** |
|                              | (0.055)                    | (0.066)                        | (0.065)                        | (0.038)  |
| Spanish z-score (2017)       | $0.052^{'}$                | 0.027                          | 0.080                          | 1.015*** |
|                              | (0.065)                    | (0.079)                        | (0.082)                        | (0.047)  |
| Math z-score (2017)          | 0.043                      | 0.018                          | 0.177*                         | 0.902*** |
| ,                            | (0.073)                    | (0.089)                        | (0.092)                        | (0.053)  |
| Missing Spanish test score   | -0.097**                   | -0.147**                       | -0.037                         | 0.383*** |
| J 1                          | (0.049)                    | (0.059)                        | (0.058)                        | (0.034)  |
| Missing math test score      | -0.098**                   | -0.138***                      | -0.037                         | 0.376*** |
| ~                            | (0.049)                    | (0.059)                        | (0.058)                        | (0.034)  |
| Average students' SES (2017) | -0.002                     | 0.144                          | 0.144                          | 3.686*** |
| -                            | (0.075)                    | (0.091)                        | (0.094)                        | (0.054)  |

Note: The table shows estimates of differences in observed school characteristics across treatments. Each row represents presents the results of regressing the corresponding school characteristic on indicators for each treatment arm. The omitted category corresponds to the group in which the control group are explicitly heterosexual parents and the request writer is a male. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. Centro educativo refers to schools that do not offer all grades of basic education (primary and basic secondary). Traditional education implies that the school offers traditional methods of education, as opposed to other flexible methods. Handicapped students means that the school has handicapped students in its roster. Calendar A refers to schools for which the academic year goes from February through November, as opposed to Calendar B schools in which classes take place between August and June. Spanish and math z-score refer to the normalized score in the 2017 3rd grade standardized tests. Missing Spanish and math test score is an indicator that takes the value of one if we were not able to obtain test scores from standardized tests for that school. Average sudents' SES refers to the average stratum of students who took the standardized 3rd grade test in 2017.

Table 2: Summary statistics for calendar B schools

| Variable   | Mean  | Std.Dev. | Observations |
|--|-------|----------|--------------|
| Basic secondary offered                              | 0.79  | 0.409    | 481          |
| Secondary school offered                             | 0.73  | 0.443    | 481          |
| Indicator for "centro educativo"                     | 0.25  | 0.433    | 481          |
| Boys-only school                                     | 0.02  | 0.128    | 481          |
| Girls-only school                                    | 0.04  | 0.205    | 481          |
| Urban area school                                    | 0.85  | 0.357    | 481          |
| Indicator for traditional education                  | 0.95  | 0.209    | 481          |
| Handicapped students                                 | 0.24  | 0.426    | 481          |
| Instruction in more than one language                | 0.4   | 0.49     | 481          |
| Average 3rd grade Spanish score in standardized test | 379.1 | 38.142   | 379          |
| Average 3rd grade math score in standardized test    | 373   | 43.29    | 381          |
| Indicator that school has religious classes          | 0.86  | 0.345    | 443          |
| Indicator that school principal is male              | 0.34  | 0.474    | 478          |

Note: The table presents summary statistics for the contacted schools which academic calendar runs from September to June. Basic secondary refers to grades 6 to 10. Secondary school refers to grades 11 and 12. Centro educativo refers to schools that do not offer all grades of basic education (primary and basic secondary). Traditional education implies that the school offers traditional methods of education, as opposed to other flexible methods. Handicapped students means that the school has handicapped students in its roster.

Table 3: Response rates for schools contacted

|                         | All  | Male | Female |
|-------------------------|------|------|--------|
| Heterosexual            | 0.53 | 0.50 | 0.57   |
| Homosexual              | 0.43 | 0.43 | 0.43   |
| Undisclosed orientation | 0.37 | 0.28 | 0.46   |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted, by sexual orientation of the parents and gender of the request writer. Undisclosed orientation refers to requests in which the name of only one parent was included, although the email was written in first person plural to convey the idea that it was a couple that was sending the request.

Table 4: Type of response by school contacted

|                                     | All  | Male | Female |
|-------------------------------------|------|------|--------|
| No response                         | 0.40 | 0.39 | 0.40   |
| Responded both requests             | 0.30 | 0.24 | 0.35   |
| Homosexual couple only              | 0.13 | 0.19 | 0.07   |
| Heterosexual couple only            | 0.22 | 0.23 | 0.21   |
| Undisclosed orientation couple only | 0.10 | 0.09 | 0.12   |

Note: The table shows the type of response obtained from schools, and the proportion of schools that belongs to each category for the sample of calendar B schools we contacted, by gender of the request writer. Undisclosed orientation refers to requests in which the name of only one parent was included, although the email was written in first person plural to convey the idea that it was a couple that was sending the request.

Table 5: Effect of sexual orientation of parents on school's response rates

|                         | (1)           | (2)           | (3)           |
|-------------------------|---------------|---------------|---------------|
|                         | Response rate | Response rate | Response rate |
| Homosexual              | -0.084***     | -0.113***     | -0.120***     |
|                         | (0.032)       | (0.038)       | (0.033)       |
| Undisclosed orientation | -0.105**      | -0.153***     | -0.201***     |
|                         | (0.048)       | (0.056)       | (0.051)       |
| Heterosexual mean       | 0.537         | 0.603         | 0.537         |
| Observations            | 949           | 720           | 936           |
| $\mathbb{R}^2$          | 0.052         | 0.062         | 0.703         |
| Controls                | No            | Yes           | No            |
| Department FEs          | Yes           | Yes           | Yes           |
| School FEs              | No            | No            | Yes           |
| Number of clusters      | 481           | 364           | 468           |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted, by sexual orientation of the parents. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Controls include indicators that the school offers basic secondary and high school education levels, an indicator that the school is in an urban area, an indicator that the school offers traditional education, an indicator that the school accommodates handicapped students, an indicator that the school offers bilingual education, an indicator that the principal is male, an indicator that the school offers religious classes, and the standardized average test score of the school in the third-grade national test in 2017. Standard errors clustered at the school level in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6: Effect of sexual orientation of parents on school's response rates, by gender of the sender

|                          | (1)         | (2)           |
|--------------------------|-------------|---------------|
| Gender of request writer | Male sender | Female sender |
| Homosexual               | -0.103**    | -0.138***     |
|                          | (0.049)     | (0.044)       |
| Undisclosed orientation  | -0.316***   | -0.083        |
|                          | (0.079)     | (0.064)       |
| Heterosexual mean        | 0.503       | 0.572         |
| Observations             | 478         | 458           |
| $\mathbb{R}^2$           | 0.652       | 0.768         |
| Controls                 | No          | No            |
| Department FEs           | Yes         | Yes           |
| School FEs               | Yes         | Yes           |
| Number of clusters       | 239         | 229           |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted, by sexual orientation of the parents and gender of the person who writes the request. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 7: Effect of sexual orientation of parents on school's time to respond, conditional on replying

|                         | (1)<br>Response time<br>(days) | (2)<br>Response time<br>(days) | (3)<br>Response time<br>(days) |
|-------------------------|--------------------------------|--------------------------------|--------------------------------|
| Homosexual              | -0.230                         | -0.082                         | 0.967                          |
|                         | (0.475)                        | (0.566)                        | (0.699)                        |
| Undisclosed orientation | -0.808                         | -0.376                         | 1.069                          |
|                         | (0.603)                        | (0.630)                        | (0.828)                        |
| Heterosexual mean       | 1.841                          | 1.863                          | 1.367                          |
| Observations            | 427                            | 362                            | 278                            |
| $\mathbb{R}^2$          | 0.021                          | 0.050                          | 0.605                          |
| Controls                | No                             | Yes                            | No                             |
| Department FEs          | Yes                            | Yes                            | Yes                            |
| School FEs              | No                             | No                             | Yes                            |
| Number of clusters      | 288                            | 243                            | 139                            |

Note: The table shows the time for calendar B schools to reply the visit requests, conditional on replying, by sexual orientation of the parents. The dependent variable is the number of days that elapsed between the moment a request was sent and the school replied. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Controls include indicators that the school offers basic secondary and high school education levels, an indicator that the school is in an urban area, an indicator that the school offers bilingual education, an indicator that the school accommodates handicapped students, an indicator that the school offers bilingual education, an indicator that the principal is male, an indicator that the school offers religious classes, and the standardized average test score of the school in the third-grade national test in 2017. Standard errors clustered at the school level in parentheses.

\*\*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.1

Table 8: Effect of sexual orientation of parents on school's time to respond, by gender of the sender

| (1)         | (2)   |
|-------------|---|
| Male sender | Female sender   |
| 2.050       | 0.100   |
| (1.490)     | (0.458)   |
| 1.883       | 0.358   |
| (1.629)     | (0.758)   |
| 1.475       | 1.280   |
| 116         | 162   |
| 0.622       | 0.555   |
| No          | No  |
| Yes         | Yes   |
| Yes         | Yes   |
| 58          | 81  |
|             | 2.050<br>(1.490)<br>1.883<br>(1.629)<br>1.475<br>116<br>0.622<br>No<br>Yes<br>Yes |

Note: The table shows the time for calendar B schools to reply the visit requests, conditional on replying, by sexual orientation of the parents and gender of the person who writes the request. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 9: Effect of sexual orientation of parents on school's response quality, conditional on replying

|                         | (1)<br>Response quality | (2)<br>Response quality | (3)<br>Response quality |
|-------------------------|-------------------------|-------------------------|-------------------------|
| Homosexual              | 0.084                   | 0.130                   | 0.092                   |
|                         | (0.117)                 | (0.123)                 | (0.134)                 |
| Undisclosed orientation | -0.046                  | 0.011                   | -0.109                  |
|                         | (0.162)                 | (0.177)                 | (0.219)                 |
| Heterosexual mean       | 0.001                   | 0.0513                  | 0.121                   |
| Observations            | 343                     | 296                     | 190                     |
| $\mathbb{R}^2$          | 0.068                   | 0.091                   | 0.732                   |
| Controls                | No                      | Yes                     | No                      |
| Department FEs          | Yes                     | Yes                     | Yes                     |
| School FEs              | No                      | No                      | Yes                     |
| Number of clusters      | 248                     | 210                     | 95                      |

Note: The table shows the quality of the response from schools who replied our requests to visit by e-mail, by sexual orientation of the parents. The dependent variable is standardized value of the grade received by the school for their reply. The mean and standard deviation used to standardize the grade correspond to those of heterosexual couples. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Controls include indicators that the school offers basic secondary and high school education levels, an indicator that the school is in an urban area, an indicator that the school offers traditional education, an indicator that the school accommodates handicapped students, an indicator that the school offers bilingual education, an indicator that the principal is male, an indicator that the school offers religious classes, and the standardized average test score of the school in the third-grade national test in 2017. Standard errors clustered at the school level in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 10: Effect of sexual orientation of parents on school's response quality, by gender of the sender

|                          | (1)         | (2)           |
|--------------------------|-------------|---------------|
| Gender of request writer | Male sender | Female sender |
| Homosexual               | 0.205       | 0.009         |
|                          | (0.240)     | (0.162)       |
| Undisclosed orientation  | -0.225      | -0.046        |
|                          | (0.373)     | (0.277)       |
| Heterosexual mean        | -0.061      | 0.254         |
| Observations             | 78          | 112           |
| $\mathbb{R}^2$           | 0.743       | 0.727         |
| Controls                 | No          | No            |
| Department FEs           | Yes         | Yes           |
| School FEs               | Yes         | Yes           |
| Number of clusters       | 39          | 59            |

Note: The table shows the quality of the response from schools who replied our requests to visit by e-mail, by sexual orientation of the parents and gender of the person who writes the request. The dependent variable is standardized value of the grade received by the school for their reply. The mean and standard deviation used to standardize the grade correspond to those of heterosexual couples. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses.
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Appendix A Protocol to determine the most appropriate contact method for each school

- 1. Using the list of schools, we selected a school and searched for its name in Google.
- 2. To collect data from the school, we used the school's official page first. If the school did not have a website, we looked for its social media page (Facebook, Instagram, etc.). In those cases, we confirmed it was indeed the correct school by looking for information such as the country and municipality in which the school is located. Even though there are websites that collect and aggregate school data in Colombia, we noticed that that information was usually outdated so we decided against using them.
- 3. If the school's website (or its page on social networks) contained a contact form, or a button that allowed us to send a message to the school, we used said form, entering the required data, as well as the message requesting an appointment to visit the school. In the event that the form required us to include personal data that was not included in the message (e.g., ID number, date of birth, postal address, etc.), we did not use the contact form and instead searched for an e-mail address to which send our request.
- 4. If a school included a contact form of the PQRS (questions, complaints, claims, suggestions), we did not use that form because Colombian regulations mandate those requests to be responded.
- 5. If no suitable contact form was found, we looked for an e-mail to make inquiries.

## Appendix B Sample of contact messages sent to schools

#### Lesbian couple

Good morning,

We are Carmen Arias Morales and Diana Rojas López. Our daughter Mariana has to start first grade in September and we are looking for a school for her.

We have received good references from the school SCHOOL NAME, but we would like to know it in more detail. Could we visit the school? If so, I would appreciate if you could let us know when it would be possible to do it. You can reach out to us by e-mail or by phone at 3197155605.

We thank you in advance for your help and we look forward to your reply,

Carmen Arias and Diana Rojas

#### Heterosexual parents

Good morning,

My name is Sandra Castro Ramírez, and with my spouse Alberto Torres Jaramillo we are looking for a school for our daughter Camila, who will start first grade next semester.

We have received good references from school SCHOOL NAME and we would like to know it a bit more. Would it be possible to visit? If so, I ask you to let us know by e-mail or phone at 3053327661 when would it be best to do so.

Thank you very much for your assistance and we look forward to your reply,

Sandra Castro and Alberto Torres

### Female parent who does not mention the name of the spouse

Good morning,

Our daughter Paola starts first grade next semester and we are looking for a school for her. We have heard good things from school SCHOOL NAME, but we would like to know it a bit more. Would it be possible to schedule a visit? If so, I ask you to let us know when would be the best time to do it, either by e-mail or at 3053327599.

We thank you very much and we look forward to your reply,

Ana María Valencia Suárez

# Appendix C Response grading rubric

| Objective measures         |                                 |                        |                              |
|----------------------------|---------------------------------|------------------------|------------------------------|
| Did the school address the | e person who wrote the message  | ge by name?            |                              |
| Yes                        | No                              |                        |                              |
| Is the school's answer wri | tten in plural? (refers to both | parents or the family  | r).                          |
| Yes                        | No                              |                        |                              |
| Does the school propose a  | meeting?                        |                        |                              |
| Yes                        | No                              |                        |                              |
| What type of meeting doe   | es the school propose?          |                        |                              |
| In person                  | Virtual                         | By phone               | NA                           |
| When does the school pro   | spose to meet or visit?         |                        |                              |
| Less than seven days       | Between eight and 30 days       | More than 30 days      | NA                           |
| Does the school provide e  | nrollment information?          |                        |                              |
| Yes                        | No                              |                        |                              |
| Does the school provide in | nformation about themselves?    | (shifts, teaching met) | hods, student support, etc.) |
| Yes                        | No                              |                        |                              |
| Does the school request a  | dditional information from the  | e child or parents?    |                              |
| Yes                        | No                              |                        |                              |
| Does the school redirect t | o another means of contact to   | arrange a visit? (form | m, other email, phone, etc)  |
| Yes                        | No                              |                        |                              |
| Does the school redirect t | o someone else?                 |                        |                              |
| Yes                        | No                              |                        |                              |
| Does the school indicate i | n the message that it tried to  | communicate by anot    | ther means? (call, WhatsApp) |
| Yes                        | No                              |                        |                              |
| Does the school indicate t | hat they do NOT have vacance    | eies?                  |                              |
| Yes                        | No                              |                        |                              |

#### Subjective measures

Please rate the school's responsiveness to the proposed visit

Not receptive Somewhat receptive Neutral Receptive Very receptive

How informative do you think the school's response to the request was?

Little informative Somewhat informative Informative Very informative Extensive and detailed

How personalized was the email?

Very generic Somewhat generic Traditional Tailored Very tailored

How do you rate the response to the email in general terms?

Negative Somewhat negative Neither positive nor negative Positive Very positive

# Appendix D Heterogeneity of responses by school characteristics

Table D1: Effect of sexual orientation of parents on school's response rates, by school quality

|                                   | (1)       | (2)         | (3)           |
|-----------------------------------|-----------|-------------|---------------|
| Gender of request writer          | All       | Male sender | Female sender |
| Panel A: Above median test scores |           |             |               |
| Homosexual                        | -0.092*   | -0.038      | -0.134**      |
|                                   | (0.054)   | (0.093)     | (0.066)       |
| Undisclosed orientation           | -0.171*   | -0.250*     | -0.068        |
|                                   | (0.089)   | (0.150)     | (0.095)       |
| Heterosexual mean                 | 0.633     | 0.623       | 0.642         |
| Observations                      | 366       | 172         | 194           |
| $\mathbb{R}^2$                    | 0.676     | 0.581       | 0.774         |
| Number of clusters                | 183       | 86          | 97            |
| Panel B: Below median test scores |           |             |               |
| Homosexual                        | -0.194*** | -0.158*     | -0.239***     |
|                                   | (0.056)   | (0.080)     | (0.079)       |
| Undisclosed orientation           | -0.298*** | -0.372***   | -0.211*       |
|                                   | (0.085)   | (0.119)     | (0.118)       |
| Heterosexual mean                 | 0.544     | 0.491       | 0.609         |
| Observations                      | 360       | 198         | 162           |
| $\mathbb{R}^2$                    | 0.686     | 0.648       | 0.736         |
| Number of clusters                | 180       | 99          | 81            |
| Controls                          | No        | No          | No            |
| Department FEs                    | Yes       | Yes         | Yes           |
| School FEs                        | Yes       | Yes         | Yes           |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted by sexual orientation of the parents, separately for high- and low-quality schools, proxied by their average result in third-grade standarized test scores. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses.

\*\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

Table D2: Effect of sexual orientation of parents on school's response rates, by SES of the students

|                          | (1)       | (2)         | (3)           |
|--------------------------|-----------|-------------|---------------|
| Gender of request writer | All       | Male sender | Female sender |
| Panel A: High SES        |           |             |               |
| Homosexual               | -0.133*** | -0.099      | -0.165***     |
|                          | (0.046)   | (0.074)     | (0.059)       |
| Undisclosed orientation  | -0.285*** | -0.370***   | -0.187**      |
|                          | (0.075)   | (0.117)     | (0.092)       |
| Heterosexual mean        | 0.633     | 0.593       | 0.671         |
| Observations             | 516       | 258         | 258           |
| $\mathbb{R}^2$           | 0.668     | 0.607       | 0.740         |
| Number of clusters       | 258       | 129         | 129           |
| Panel B: Low SES         |           |             |               |
| Homosexual               | -0.158**  | -0.103      | -0.214**      |
|                          | (0.071)   | (0.105)     | (0.095)       |
| Undisclosed orientation  | -0.137    | -0.215      | -0.024        |
|                          | (0.104)   | (0.155)     | (0.130)       |
| Heterosexual mean        | 0.474     | 0.448       | 0.500         |
| Observations             | 210       | 112         | 98            |
| $\mathbb{R}^2$           | 0.709     | 0.663       | 0.786         |
| Number of clusters       | 105       | 56          | 49            |
| Controls                 | No        | No          | No            |
| Department FEs           | Yes       | Yes         | Yes           |
| School FEs               | Yes       | Yes         | Yes           |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted by sexual orientation of the parents, separately for high- and low- average socio-economic status of the children who attend. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table D3: Effect of sexual orientation of parents on school's response rates, by type of school

|                            | (1)       | (2)         | (3)           |
|----------------------------|-----------|-------------|---------------|
| Gender of request writer   | All       | Male sender | Female sender |
| Panel A: Religious schools |           |             |               |
| Homosexual                 | -0.140*** | -0.096*     | -0.186***     |
|                            | (0.036)   | (0.056)     | (0.045)       |
| Undisclosed orientation    | -0.231*** | -0.314***   | -0.125        |
|                            | (0.059)   | (0.087)     | (0.076)       |
| Heterosexual mean          | 0.575     | 0.530       | 0.619         |
| Observations               | 744       | 386         | 358           |
| $\mathbb{R}^2$             | 0.706     | 0.659       | 0.772         |
| Number of clusters         | 372       | 193         | 179           |
| Panel B: Secular schools   |           |             |               |
| Homosexual                 | -0.050    | -0.091      | 0.000         |
|                            | (0.105)   | (0.141)     | (0.171)       |
| Undisclosed orientation    | -0.145    | -0.391      | 0.091         |
|                            | (0.176)   | (0.308)     | (0.195)       |
| Heterosexual mean          | 0.450     | 0.455       | 0.444         |
| Observations               | 122       | 64          | 58            |
| $\mathbb{R}^2$             | 0.609     | 0.543       | 0.691         |
| Number of clusters         | 61        | 32          | 29            |
| Controls                   | No        | No          | No            |
| Department FEs             | Yes       | Yes         | Yes           |
| School FEs                 | Yes       | Yes         | Yes           |
|                            |           |             |               |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted by sexual orientation of the parents, separately for schools that teach religion and those that do not. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses. \*\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

Table D4: Effect of sexual orientation of parents on school's response rates, by gender of the school principal

|                           | (1)       | (2)         | (3)           |
|---------------------------|-----------|-------------|---------------|
| Gender of request writer  | All       | Male sender | Female sender |
| Panel A: Female principal |           |             |               |
| Homosexual                | -0.064    | -0.079      | -0.046        |
|                           | (0.041)   | (0.059)     | (0.058)       |
| Undisclosed orientation   | -0.162**  | -0.325***   | 0.003         |
|                           | (0.065)   | (0.100)     | (0.080)       |
| Heterosexual mean         | 0.500     | 0.475       | 0.529         |
| Observations              | 620       | 324         | 296           |
| $\mathbb{R}^2$            | 0.691     | 0.639       | 0.764         |
| Number of clusters        | 310       | 162         | 148           |
| Panel B: Male principal   |           |             |               |
| Homosexual                | -0.232*** | -0.159*     | -0.294***     |
|                           | (0.056)   | (0.095)     | (0.066)       |
| Undisclosed orientation   | -0.281*** | -0.315**    | -0.225**      |
|                           | (0.086)   | (0.134)     | (0.109)       |
| Heterosexual mean         | 0.611     | 0.568       | 0.647         |
| Observations              | 312       | 152         | 160           |
| $\mathbb{R}^2$            | 0.732     | 0.681       | 0.794         |
| Number of clusters        | 156       | 76          | 80            |
| Controls                  | No        | No          | No            |
| Department FEs            | Yes       | Yes         | Yes           |
| School FEs                | Yes       | Yes         | Yes           |

Note: The table shows the proportion of requests that were responded by the calendar B schools we contacted by sexual orientation of the parents, separately for schools whose principal is female and male. The dependent variable is an indicator that takes the value of one if the school replied to the request to visit. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses.

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1

## Appendix E Additional Figures and Tables

Table E1: Effect of sexual orientation of parents on school's response objective and subjective quality metrics, by gender of request sender

|                             |         | (-)         | (-)           |
|-----------------------------|---------|-------------|---------------|
|                             | (1)     | (2)         | (3)           |
| Gender of request writer    | All     | Male sender | Female sender |
| Panel A: Objective metrics  |         |             |               |
| Homosexual                  | 0.194   | 0.339       | 0.087         |
|                             | (0.132) | (0.242)     | (0.155)       |
| Undisclosed orientation     | -0.018  | 0.006       | -0.048        |
|                             | (0.209) | (0.324)     | (0.280)       |
| Heterosexual mean           | 0.042   | -0.176      | 0.202         |
| Observations                | 190     | 78          | 112           |
| $\mathbb{R}^2$              | 0.774   | 0.813       | 0.733         |
| Number of clusters          | 95      | 39          | 56            |
| Panel B: Subjective metrics |         |             |               |
| Homosexual                  | 0.031   | 0.112       | -0.030        |
|                             | (0.137) | (0.232)     | (0.175)       |
| Undisclosed orientation     | -0.137  | -0.303      | -0.039        |
|                             | (0.234) | (0.413)     | (0.289)       |
| Heterosexual mean           | 0.141   | 0.002       | 0.244         |
| Observations                | 190     | 78          | 112           |
| $\mathbb{R}^2$              | 0.699   | 0.700       | 0.703         |
| Number of clusters          | 95      | 39          | 56            |
| Controls                    | No      | No          | No            |
| Department FEs              | Yes     | Yes         | Yes           |
| School FEs                  | Yes     | Yes         | Yes           |

Note: The table shows the difference in objective and subjective measures used to assess the quality of the response from schools who replied our requests to visit by e-mail, by sexual orientation of the parents and gender of the person who writes the request. Objective measures include whether the school greeted the sender by name, whether the response is written in plural, whether the school proposes a meeting, whether the school informs about the enrollment process, whether the reply includes information about the school, whether the school asks for additional information about the child or the parents, whether the school redirects the request to other person or other contact channel, whether the school indicates that it has tried to reach out to the parents through other means (phone, WhatsApp), and whether the school indicates that it has no vacancies. Subjective measures (in scales of 1 to 5) includes how receptive was the school to the request, how informative was the response, how customized was the response, and the overall "feel" of the response. In each panel, the dependent variable is standardized value of the corresponding grade received by the school for their reply. The mean and standard deviation used to standardize the grade correspond to those of heterosexual couples. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table E2: Effect of sexual orientation of parents on the number of words used by schools in their reply, by gender of request sender

|                          | (1)      | (2)         | (3)           |
|--------------------------|----------|-------------|---------------|
| Gender of request writer | All      | Male sender | Female sender |
| Homosexual               | -6.169   | -32.280     | 13.029        |
|                          | (21.126) | (28.010)    | (31.178)      |
| Undisclosed orientation  | 24.247   | -75.994*    | 90.620        |
|                          | (51.118) | (43.307)    | (79.511)      |
| Heterosexual mean        | 121.6    | 153         | 98.50         |
| Observations             | 190      | 78          | 112           |
| R2                       | 0.603    | 0.747       | 0.577         |
| Controls                 | No       | No          | No            |
| Department FEs           | Yes      | Yes         | Yes           |
| School FEs               | Yes      | Yes         | Yes           |
| Number of clusters       | 95       | 39          | 56            |

Note: The table shows the difference in the number of words used by schools in their replies, by sexual orientation of the parents and gender of the person who writes the request. Homosexual refers to same-sex couples conveyed by the names of the parents. Undisclosed orientation refers to requests in which the name of only one of the parents was included, despite the request being written in the first person plural. The base group correspond to heterosexual couples. Standard errors clustered at the school level in parentheses.

\*\*\*\* p < 0.01, \*\*\* p < 0.05, \* p < 0.1