No Room for New Families? A Field Experiment Measuring Rental Discrimination Against Same-Sex Couples and Single Parents

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ABSTRACT

We suggest that new forms of family households, especially same-sex couples and single parents, are likely to face discrimination in their interactions with rental markets. Following the contact hypothesis, we hypothesize that the geographic distribution of discrimination is likely to vary. Specifically, in places with more new family households we are likely to find less discrimination against these households. We investigate these issues in the metropolitan area of Vancouver, Canada, through analysis of 1,669 inquiries made about one and two bedroom apartments. Using a field experimental design similar to audit studies, we analyze landlord responses to five different two-person household scenarios, including one heterosexual couple, two same-sex couples, and two single parents. Evidence suggests that male same-sex couples, single mothers, and single fathers all face significant discrimination relative to heterosexual couples. The contact hypothesis was supported for male same-sex couples, but not for single parents. This could indicate that single parents are facing discrimination primarily based upon their economic marginalization rather than other forms of prejudice.
HOUSING DISCRIMINATION AND NEW FAMILY HOUSEHOLDS

Social scientists have called attention to dramatic changes in the ways families and family households are formed, dissolved, understood, and experienced, both in North America (Coontz, 2004; Goldscheider & Waite, 1991; Stacey, 1990) and more broadly (Lesthaeghe, 1995; Kiernan, 2004). The dominance of marriage as the central relationship binding adults to families has been increasingly challenged by alternatives (Cherlin, 2004; Le Bourdais & Lapierre-Adamcyk, 2004). Non-marital cohabitation has become more common, children are increasingly likely to be born outside of marriage, and the bonds of marriage have also become somewhat less stable. At the same time, marriage has become more inclusive in many places, extending to same-sex couples. As a result of these shifts, certain forms of new family households have become increasingly common. These new households must secure housing in order to form, yet we argue it is possible, even likely, that they will face significant discrimination in the process.

Below we examine discrimination against two such new family household types: same-sex couple households and single parent households. We focus especially on discrimination in the rental market, as it pertains to landlord acceptance of potential tenants. Various forms of discrimination have also been shown to occur in other aspects of the housing market, such as the redlining of neighborhoods (refusing to finance mortgages) based on racial characteristics, differential lending practices, and the steering of buyers toward particular neighborhoods (Novac, et al, 2002; Ondrich, et al, 2003; Pager & Shepherd, 2008; Ross & Turner, 2005). However, the rental market is especially important as a site of discrimination, both because it
often serves as an entry point into the housing market for new households, and because declines
in rental investment across North America have left an increasingly large pool of households
competing for relatively few affordable rental units (Ley, 1996).

Much has been written about discrimination in the rental market, but the literature is almost
entirely focused on race and ethnicity. There is consistent evidence that discrimination against
racial minorities occurs in the housing market, though the extent of discrimination may have
lessened in recent years (Novac, et al, 2002; Pager & Shepherd, 2008; Roscigno, et al, 2008;
Ross & Turner, 2005; Yinger, 1998). To a lesser extent, the literature has also documented
discrimination by sex and gender (Ahmed & Hammarstedt, 2008; Galster & Constantine, 1991;
Massey & Lundy, 2001; Novac, et al, 2002). The direction of this discrimination has not
discrimination against women in the United States. By contrast, Ahmed and Hammarstedt
(2008) find that men are discriminated against in Sweden.

Quite recently, a scattered handful of studies have explored sexual orientation as the basis for
Centers, 2007; Page, 1998). Small audit studies performed in Ontario and Michigan
demonstrated significant differences in treatment for those declaring their homosexuality (Page,
1998) or applying for housing as a same-sex couple (Michigan Fair Housing Centers, 2007).
Audits carried out via e-mail in Sweden revealed significant rental discrimination against couples
of presumably gay men (Ahmed & Hammarstedt, 2009), but not against lesbian couples (Ahmed,
et al, 2008). Nevertheless, Herek (2009) suggests that only a relatively small proportion of the gay, lesbian, and bisexual community in the US feel they have experienced housing discrimination. Overall, no large-scale studies of housing discrimination against same-sex couples have been carried out in North America, and no studies have explored geographic variation in discrimination against same-sex couples within metropolitan areas. Reflecting the overall dearth in research, reports in both Canada (Novac, et al, 2002) and the United States (HUD, 2010; Michigan Fair Housing Centers, 2007) call for more research on housing discrimination by sexual orientation.

In exploring other variations in the reception of family households, a large study of rental policies documented explicit discrimination against families with children in the US, and many substantiated cases of discrimination have appeared in the courts (Allen, 1995). Nevertheless, while cases have been brought to court, there have been few studies of discrimination against families with children in Canada (Novac, et al, 2002). Remarkably few studies have looked at single parents, as opposed to parents in general. Galster and Constantine (1991) attempted to measure discrimination on the basis of gender in 1985 by auditing 11 landlords in Wooster, Ohio using three different volunteer auditors: a single man, a single woman, and a single mother. They found that while both women encountered discriminatory treatment relative to men, single mothers ran into no more incidences of discrimination than single women living alone. In a study of single mother’s housing strategies, Clampet and Lundquist (2003) assumed that discrimination against them was only based on race. Other studies have asserted that some single mothers believe their status as parents negatively influenced their reception (Novac,
No large-scale study has addressed housing discrimination against single parents, nor has geographic variation in discrimination against single parents within metropolitan areas been explored.

Measuring discrimination has important legal ramifications, both for the enforcement of existing laws and for the creation of new laws. In many jurisdictions, discrimination against new families is clearly illegal. For example, in the British Columbia Human Rights Code, discrimination is prohibited on the basis of, “…race, colour, ancestry, place of origin, religion, marital status, family status, physical or mental disability, sex, sexual orientation, age or lawful source of income of that person or class of persons, or of any other person or class of persons.” (B.C. Human Rights Code, 2010: Section 10). The presence of marital status, family status, and sexual orientation in the code all serve to place legal restrictions on discrimination against new family households, and similar codes are in existence across Canadian provinces and territories. In the USA, the 1988 Housing Act forbade discrimination against families with children. Marital status and sexual orientation are not covered under federal anti-discrimination laws, but many municipalities have enacted regulations preventing housing discrimination on the grounds of sexual orientation (HUD, 2010; Michigan Fair Housing Centers, 2007). The recent interest expressed by HUD in measuring housing discrimination on the basis of sexual orientation speaks to the possibility of more centralized regulation to limit such discrimination in the future (Hawkins, 2010; HUD, 2010; Razzi, 2010). In this context, reliable data on how often new family households are likely to encounter discrimination is important both for assessing the effectiveness of current laws and providing information on whether new laws may be advisable.
It is important to note that household size is a complicating factor in all cases of discrimination by family status. Although challenges may be mounted, landlords in both Canada (e.g. B.C. Residential Tenancy Branch, 2009) and the United States (Morales, 1996; Pader, 2002) are often allowed to use maximum occupancy restrictions as the basis for discriminating against prospective renters. In this sense, discrimination on the basis of household size is seen as legitimate so long as it serves a health code or business interest (e.g. limiting wear and tear on property and services). In effect, this often allows landlords to legally discriminate against most families with children by employing maximum occupancy restrictions preventing more than two people from living in a unit (Morales, 1996; Pader, 2002). In this circumstance, single parents of single children constitute the exceptional type of household containing a child that is able to avoid most occupancy restrictions.

DISCRIMINATORY PROCESSES

From a legal standpoint, the decision-making process by which discrimination occurs is typically important only insofar as it establishes intent, identifying a protected status as the basis for discriminatory actions. The constraining impact of discrimination is felt by households regardless of the decision-making process of the landlord or rental authority, a factor recognized in establishing that disparate impact may constitute illegal discrimination regardless of intent (Morales, 1996). However, from the standpoint of understanding trends in discrimination and identifying broader policy tools important for reducing discrimination, decision-making...
processes matter. In particular, it may be useful to contrast discriminatory decision-making processes based upon prejudicial ignorance or unfamiliarity with a status from those based upon actual correlations of statuses with other characteristics a landlord may consider problematic, but may not be able to assess directly. These two broad categories roughly map onto what is described in the literature as discrimination based on prejudice (either the landlord’s or the landlord’s customer base) and statistical discrimination (Ahmed, et al, 2010; Ross & Turner, 2005). The distinction between the two types of discrimination is important insofar as they interact with the “contact hypothesis” (Choi, et al, 2005). Following Allport (1954), the “contact hypothesis” argues that prejudicial ignorance may be directly reduced by contact with minority group members, especially group members of similar status as landlords (Ross & Turner, 2005). Similarly, such contact may further recognition of minority group members as a valuable customer base. However contact with minority groups may fail to influence, or even reinforce statistical discrimination.

Focusing on prejudicial ignorance, landlords, apartment managers and other rental authorities choosing tenants (hereafter referred to collectively as landlords) may reject applicants based on their own prejudice. New family households may be perceived as providing challenges to more “traditional” family households, but they have not displaced them from demographic dominance (Lauer & Yodanis, 2010). In this sense, members of new family households may be defined as belonging to distinct minority groups. As per other groups facing housing discrimination, new family households made up of same-sex partners and single parents may be seen as morally suspect and tainted outright (Bock, 2000; Dowd, 1995; Herek, 2009), or threatening, hence
leading landlords to seek group closure (Tilly, 1998). They may trigger false stereotypes (Herek & Capitano, 1996; Little, 1994) and be seen as challenging tenants. For single parents, this may result simply from landlord concerns over the children they bring into rental units, as suggested by Novac (1994). This sort of discrimination would affect both two parent families and lone parent families, but the fact that single parents are much more likely to live in rental apartments than two parent families makes this a larger problem for single parents. New family households may also seem incomprehensible to some, resulting in their exoticization (Kitzinger, 2005). Landlords may discriminate against them based on feeling they lack the information to properly assess the risks with accepting them as tenants. Even in absence of prejudice, landlords may feel that new family households would offend the neighbors or drive away other desirable tenants.

Alternatively, landlords may reject tenants based upon their statistical understanding of how membership within a group correlates with financial position, stability, and other characteristics of relevance to landlord assessment of risk (Choi, et al, 2005). This form of discrimination may be distinguished from landlord prejudice by whether or not beliefs are based on false stereotypes or simple statistical correlations and/or direct observations of landlords. For instance, Ross and Turner (2005) suggest that landlords may be aware of the higher unemployment rates for certain minority groups. As a result, they may discriminate against members of these groups based not on prejudice or false belief, but based on an informed (if reductively fallible and highly problematic) assessment of risk (see also Phelps, 1978). This speaks to structural disadvantage, or the ways in which the accumulated disadvantage of minority groups as a result of

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1 Nearly half (46.1%) of lone parents live in rental housing in Canada, making them almost three times more likely to rent than married or common-law couples (16.3%), see Statistics Canada (2010).
discrimination in multiple other areas (education, job search, promotion, credit, etc.) may lead to yet further discrimination in interactions with the housing market (Pager & Shepherd, 2008). Landlords may assume that new family households represent poor risks, due to their recognized economic and social marginalization. Single mothers, for example, are overrepresented amongst those on social assistance in Canada (Fuller, et al, 2008). Recent survey evidence of Canadian landlords suggested that landlords tend to choose working couple households as the most desirable, and largely avoid single parent households and households on welfare as riskier tenants (Pomeroy, 2001). In this, the wider marginalization of lone parents in Canada may contribute to poor access to housing directly, through the reduced ability of single parents to afford market housing, and indirectly, through landlord discrimination against single parents based on the perception that they will be less likely to maintain rent payments. It is possible that landlords may similarly believe that groups like gays, lesbians, and bisexuals are similarly marginalized and less likely to make their rent payments, though there is less evidence to support this assertion than is the case for single parents.

Overall, negative attitudes toward new family households may be decreasing. A host of researchers speak to the deinstitutionalization of marriage and family life in general and the liberalization of sexual norms (Cherlin, 2004; Coontz, 2004; Goldscheider & Waite, 1991). Evidence suggests that attitudes about gays and lesbians become more accepting as people get to know gay and lesbian individuals, broadly supporting the contact hypothesis (Herek & Capitanio, 1996). Acceptance of alternative family forms is also more prevalent for those with greater education (Kite & Whitley, 1996). However, researchers caution that received narratives
about these trends often overstate the decline of family norms (Lauer & Yodanis, 2010), especially insofar as family norms continue to guide expectations and help people make sense of the world around them (Gross, 2005). Loftus (2001) demonstrates that attitudes toward homosexuality have gone through periods of both greater liberalization and conservative retrenchment since the 1970s. Similarly, Jacobs, Kemeny, and Manzi (2003) document the ways single mothers were once viewed sympathetically in the United Kingdom, only to become demonized and associated with housing problems following shifts in political rhetoric. The shifting nature of attitudes makes it particularly important to document any shifts in discriminatory behavior.

As the contact hypothesis suggests, the process by which behaviors change may be linked to proximity. In places with higher proportions of minority group members, discrimination based on landlord prejudice may decline. Similarly, discrimination based on perceived customer base prejudice in these places may also decline, since landlords are more likely to have recruited or consider recruiting other tenants from minority groups as well. Multiple studies have found empirical evidence supporting a positive correlation between local representation of minorities and access to apartments for minority applicants (Choi, et al, 2005; Fischer & Massey, 2004). Yet contact with minority group members may fail to reduce statistical discrimination to the extent that landlord observations come to associate group membership with riskiness (e.g. problems paying rent).

STUDY DESCRIPTION
In the study that follows, carried out from March 5th-March 18th in 2009, we compare the reception of inquiries about apartments listed for rent in the greater Vancouver metropolitan area based on different two person family household scenarios. In particular, we compare the reception of inquiries from heterosexual couples to the reception of inquiries from same-sex couples and single parents. We also attempt to establish whether or not geographic location has an influence in line with the contact hypothesis, such that areas with greater representation of the new family types studied will prove less discriminatory against those family types.

We limit our study to two person family households in order to avoid the complicating issue of household size and how it interacts with maximum occupancy restrictions. Noticeably, this study design does not make it possible to directly determine whether or not any discrimination against single parents is based primarily upon the presence of children (hence also potentially affecting two parent families) or primarily upon the type of parenthood. As mentioned earlier, any study attempting to compare the treatment of lone parents to the treatment of two-parent households would necessarily have to contend with the complicated relationship between household size and household composition, which we set aside here. However, as we suggest below, interpretation of findings in conjunction with qualitative evidence may be helpful in considering the possible bases for discrimination. For the purposes of the present research, we suggest that discrimination against single parent two person households relative to other two person households is important to study in its own right. Most single parents in Canada share residence with a single child (over 60%), constituting a two-person family unit. Moreover, lone
parent households experience some of the highest levels of core housing need\(^2\) in Canada (CMHC, 2010a). Given that landlords may not legally distinguish between types of two person households, though they may restrict against households of larger size, it is important to explore whether or not two person lone parent households are being discriminated against relative to alternatives.

Overall, Canada is known as a relatively liberal country, and same-sex marriage was legalized across the country in 2005 (it had been legal in British Columbia since 2003). The number of same-sex couples enumerated in Canada jumped 32.6% between 2001 (the first time they were recorded) and 2006. The proportion of families made up of single parents also reached a new high of 15.9% in Canada in 2006 (up from 11.3% in 1981), with recent growth in the category greater for single fathers than single mothers (Milan, et al, 2007).

Vancouver, on the west coast, is Canada’s third largest metropolis, and is known as a tolerant, multicultural, and liberal city within Canada. A bi-weekly newspaper, the Xtra! West, serving the local gay community. Statistics Canada (2007) reported that based on 2006 census data, Vancouver contained just over 10% of the same-sex couples in Canada, or approximately 4,685 couples, which is likely an underestimate. A variety of services also cater to single parents in Vancouver, including various local support groups operating out of Vancouver’s neighborhood houses and community centres, and larger groups like the Parent Support Services of BC. Some housing support is provided to low-income single parent families through BC Housing’s Rental

\(^2\) Core housing needs refers to households currently in unacceptable housing situations and unable to afford acceptable housing, where acceptability is determined by standards of crowding, repair, and rent-to-income ratio.
Assistance Program (RAP). In the 2006 census there were 71,245 single mother families, and 16,865 single father families living in the Vancouver metropolitan area, representing a little over 15% of families. The sizable communities and presence of support systems in place for same-sex couples and single parents in Vancouver would suggest that the metropolis might provide a hard-test case for finding evidence of discrimination.

While Vancouver is known as a liberal city, it is also known as a very expensive city with low vacancy rates, where it is difficult to find affordable places to live. Rents as measured for two bedroom apartments increased slightly during the time period of the present study to an average of $1,169 per month, placing Vancouver as the most expensive metropolitan area in Canada (CMHC, 2009). However, during the same time period, CMHC estimated vacancy rates rose from 0.5% in October of 2008 to 2.1% in October of 2009 (CMHC, 2009), likely reflecting the economic downturn. While official rates, concentrating on multi-unit rental buildings, may not be entirely reflective of all apartments advertised (CMHC, 2005), the rise in official vacancies probably meant that landlords were less likely to be choosy than normal during the study period. Landlords tend to be smaller, owning fewer units, and less institutional in Vancouver than in other Canadian cities. Over half of landlords surveyed in 2005 through a random selection of real estate ads owned three units or fewer (CMHC, 2005), and the secondary market (condominium rentals, secondary suites, etc.) appears to be larger than the purpose-built apartment rental market (CMHC, 2010b). Overall, the lack of rental apartment consolidation in conjunction with low vacancy rates means that there is likely to be very little steering of prospective tenants between properties.
At a more local level, Vancouver likely contains great municipal area variation in the degree to which new families might feel at home. Davie Street and its surrounds in the West End neighborhood of downtown Vancouver are particularly associated with a vibrant and historic gay community. A 1998 survey estimated that about 5,100 gay or bisexual men lived in the West End, constituting approximately one quarter of the population of male residents over 20 (Low-Beer, et al, 2002). The Westside of Vancouver is also home to the University of British Columbia, BC’s largest university. While Statistics Canada provides no local breakdowns of same-sex couples, a 2007 report suggests that same-sex couples are more likely to live in central municipalities of metropolitan areas than peripheral ones (Statistics Canada, 2007).

Furthermore, over 20% of couples in the combined Westside and downtown areas of Vancouver are common-law couples, relative to approximately 10% for the remainder of the metropolitan area (see Appendix One for details). Given the recent nature of same-sex marriage in BC and the small proportion of same-sex couples married (estimated at 18.9% in Vancouver), this may serve as an additional indicator of the relative size of the gay, lesbian, and bisexual population in this area. For these reasons, we consider the Westside and Downtown of Vancouver to constitute a zone of familiarity with same-sex couples. Notably, this zone contains the densest and most expensive rental housing in the metropolitan area as a whole, and has also seen significant gentrification over recent decades (Ley, 1996).

Single parents are overrepresented in the municipal areas of Eastside Vancouver, Burnaby and New Westminster. Single parents represent 18% of all families across these municipalities
relative to 14% across the remainder of the metropolitan area. These locations remain centrally located within the metropolitan area, close to prominent services (especially for low-income families), with high proportions of the population renting, but tend to be cheaper than downtown and the Westside of Vancouver. On this basis, we consider the Eastside of Vancouver, Burnaby and New Westminster as a zone of special familiarity with single parents.

By contrast with the zones of special familiarity with new families described above, the remainder of the metropolitan area is the most familiar with children as a whole. Over one quarter of the population of the more suburban municipal areas (not included above) are under the age of 20, as compared to less than 19% for the zones described above. On the whole, the metropolitan area of Vancouver, is readily divided into a central high amenity, high rent zone of the city, where same-sex couples are overrepresented (as well as single adults), a lower-amenity, lower-rent, but still central zone of the city where single parents are overrepresented, and the more far-flung suburban zone where children are overrepresented. Dividing the metropolitan area into these zones on the basis of housing market and familial factors is helpful in terms of understanding where and how the contact hypothesis might be at work, as we discuss further below.

METHODS
We follow a field experimental approach to measuring discrimination in this study, based on responses to e-mail inquiries about apartments sent out to landlords advertising through an electronic marketplace. This is a relatively new method for assessing discrimination, corresponding to the widespread movement of rental markets on-line and offering both distinct advantages and some limitations relative to older forms of audit studies (Bosch, et al, 2010; Carpusor & Logas, 2006). Historically audit studies of housing discrimination have relied upon trained auditors following substantively similar scripts and interacting with landlords in succession to see whether or not their reception varies by isolated sources of variation between the auditors. Here we rely upon scripted e-mails to insure similarity between inquiries, more carefully isolating sources of variation than is possible in older audit designs (Heckman, 1998; Ross & Turner, 2005). Relying upon e-mail allows us to contact a relatively large sample of landlords, making it unnecessary to contact the same landlord more than once in order to increase the power of the analysis. Contacting each landlord only once insures that landlords can receive identical e-mail inquiries without raising suspicions. A single contact procedure also offers potential advantages in terms of avoiding the introduction of bias through inquiry order and avoiding the ethical dilemma of providing landlords with an unrealistic sense of demand for their properties. Our approach is similar to that of Carpusor & Logas (2006) and Bosch, et al (2010), who explore variation in landlord responses to electronic inquiries by names associated with different ethnicities included in e-mails. We follow Ahmed, et al (2008) and Ahmed & Hammarstadt (2010) in exploring variation by couple status in e-mails (heterosexual vs. same-sex), and we add variation by single parental status.

3 Though studies have suggested that auditor attributes aside from those being used as treatment effects (e.g. education) matter for reception, their inclusion in models has not diminished estimates of discriminatory treatment (Ross & Turner, 2005; Turner, et al, 2002).
To carry out the study, undergraduate and graduate student members of an upper-level class focused on housing issues at the University of British Columbia were divided into nine research teams. Teams were supervised by the instructor and a research assistant as they carried out the project following a set of detailed instructions. Each research team was assigned to one of nine municipal areas in the Vancouver metropolitan area, as in Appendix One. Of note, in Vancouver as elsewhere, much of the rental market has moved on-line (Ahmed, et al, 2008; Bosch, et al, 2010). While local newspapers continue to carry ads for rental housing, larger collections of ads are updated daily at sites like craigslist.org and kijiji.com. Most landlords using these services provide an e-mail contact, allowing inquiries to be sent on-line. E-mail contact offered greater flexibility for research teams and allowed for easier documentation of procedures. At the same time, it is important to note that rental transactions are rarely completed via electronic communications. E-mailed inquiries represent the first step in the process, and represent only one site of possible discrimination in the larger renting process.

Using the dominant on-line marketplace offering apartment rental listings in the Vancouver area, teams identified advertisements listed as available in each region. Teams limited their searches to apartments listed as having one or two bedrooms and running less than $1700/month in rent. Teams limited bedrooms and price in this way to avoid applying to apartments outside of the reach of normal two person households. In particular, this cap reflected the maximum rent an average teacher in British Columbia might be able to afford to pay at 30% of his/her gross income (estimated at $5,374.75/month in 2005, see B.C. Ministry of Education, 2005). Within
the context of the on-line market, this limit also avoided rental authorities listing apartments at very high prices hoping to capitalize on the ignorance of prospective tenants unfamiliar with normal rents. Each day for two weeks during March of 2009, members of each research team would use a shared e-mail address to send inquiries to apartment listers using one of five invented scenarios, to see whether or not (and how) rental authorities would respond.

Invented scenarios sent to apartment listers were practically identical, save for the details about the relationship between the members of the two-person family household making the inquiry. As much as possible, each scenario was meant to provide the same details excepting for relationship. This was easiest to accomplish with the first three scenarios, involving adult couples. The use of the word ‘partner’ in these scenarios was meant to indicate an intimate relationship, however, we recognize the possibility that different landlords may have interpreted the meaning of ‘partnership’ in more platonic ways, a problem more broadly recognized in the measurement of discrimination based on sexual orientation (HUD, 2010). In this sense, again, we caution that the results of this study should be taken as conservative estimates of discrimination. In all scenarios, the primary applicant was made a teacher. The relationship was specified in such a way that the other prospective tenant would be a student, either in an unspecified professional program, or in the third grade. We recognize that these are not equivalent statuses, and the professional student might, for instance, more reasonably be expected to provide support in paying for the apartment, making them possibly more attractive than the third grader. However, we meant to introduce the idea that a single and relatively reliable earner would be primarily responsible for paying the rent in all cases. All the names are
anglicized in all scenarios. This is an attempt to avoid introducing any complicating exoticism due to varying assumptions about race or ethnicity. See Appendix Two for details of scenarios.

On each day of the project, research teams sent inquiries to the first 15 advertisements they came across that fit their region, given a random starting point in the set of search pages available in the on-line market for the day, which would, in turn, differ given the start time for each group. This was done to effectively randomize the ads receiving inquiries. Each group kept track of advertisements previously receiving inquiries, so as to avoid targeting them again. Groups would rotate through scenarios as they made inquiries, starting with a randomly selected scenario each day. Across two weeks, a total of 210 advertisements in each region could receive inquiries. However, in the regions with smaller rental stocks, research teams sometimes failed to find 15 new ads in a given day, and so ended their searches making fewer inquiries. Similarly, sometimes research team error resulted in fewer inquiries being sent or responses being recorded. Heterosexual couple scenarios were slightly overrepresented in inquiries due to a team error during the first study day, but there is no reason to think this might bias results. In four cases, inquiries were sent to listings (usually studios) not eligible for the study. In six cases, inquiries from different scenarios but using the same e-mail address were sent more than once to the same listing agent (often agents who had listed the apartment more than once under different headings). In 41 cases, responses were not properly recorded. As a result, a total of 51 inquiries were dropped from the study. Overall this resulted in a total of 1,669 observations.
Research teams took note of the rental price, number of bedrooms (1 or 2), date of inquiry, and scenario assigned for each inquiry. In six cases, missing information on bedrooms or price was imputed using region and price (in the former case) or bedrooms (in the latter case) as predictors. Because price was highly correlated with number of bedrooms and location of the apartment, we modified this variable for modeling to avoid multicollinearity and to add theoretical coherence. We separately estimated the median price of one and two bedroom sizes within each region of the study. We then subtracted the price obtained from each ad from the corresponding median price for similar apartments in the region. This provided us with an estimate of price difference uncorrelated to bedroom number and region, but instead reflecting whether or not an apartment seems very cheap or very expensive given its basic characteristics. Finally, in exploring the timing of the study, we noted that the first day of inquiries received more responses than later days. This may have had to do with a larger range of apartments for many groups to select from on the first day, and the closer proximity of the first day to the beginning of the month, when apartments typically become available. As a result, we constructed a dummy variable measuring whether or not inquiries were made on the first day of the project (see summaries of variables for the dataset in Appendix Three for further information).

Teams also kept track of any responses to each inquiry. After eliminating extraneous identifying details to preserve the anonymity of landlords, the substance of each response was kept and coded, either as a positive response, a negative response, or a more ambiguous request for more information. Codes were checked over by the research assistant and lead investigator for consistency. Most inquiries either met with a positive response (58%) or received no response at
all (36%), with relatively few negative responses (just over 3% of sample) or requests for more information (just over 2% of sample). Responding landlords received a short and polite e-mail thanking them for their response, and indicating the household was looking at other places and no longer interested in the place being listed. As a result of our procedures, landlords could not readily ascertain that they had received imaginary inquiries rather than real ones, but were also unlikely to be greatly inconvenienced by participation. Similarly by design, researchers could not identify any of the landlords receiving inquiries as part of the study.

It is important to reiterate that our interest is in measuring overall disparities in treatment in rental markets around Vancouver, rather than individual disparities assigned to specific landlords. We recognize that landlords might fail to respond to an inquiry for any number of reasons. Similarly, negative landlord responses, especially responses indicating that a unit has already been taken, might reflect their distaste for a particular applicant, but might also (and more likely) reflect the truth. In this sense, the study seldom directly measures discrimination. The only time information about discrimination directly appears in the dataset is when rental authorities indicate in the content of their negative responses their logic for not making the apartment available to the imaginary tenant. This happened only rarely, as we discuss further below.

ANALYSIS
We took both quantitative and qualitative approaches to analyzing the data. Quantitatively we assessed the difference in the likelihood of receiving a positive response depending upon the scenario. In particular, we compared the reception of the heterosexual partnership to the reception of other, less normative, relationships to get a sense of the prevalence of discrimination in the rental market. We did this through simple descriptive statistics and more advanced statistical modeling, as detailed below. In the advanced modeling, we attempted to assess differences in discrimination by location. Qualitatively, we briefly provide a description of the content of negative responses and requests for more information received from landlords.

Table one provides descriptive information on the responses received by each scenario, weighted by proportion of rental stock within each municipal area to reflect the rental market as a whole. Overall, most prospective tenants received a positive response after their first electronic inquiry into the rental listing, regardless of scenario. This is likely because inquiries were made shortly after the rental units were listed on the on-line market, meaning relatively few units should have been rented already. However, some inquiries were met with negative responses, and many more inquiries were not met with any response at all. A few responses were requests for more information, which presented an additional barrier to finding out whether or not an apartment was taken, but which were difficult to code as simply positive or negative. Heterosexual couples and same-sex female couples were practically tied for the most positive responses. Same-sex male couples received the fewest positive responses, and were the only group to drop below a 50% overall positive response rate. Single parents were somewhere inbetween, with both single mothers and single fathers significantly less likely to receive a positive response than
heterosexual couples. In terms of dispositive responses, same-sex male couples were the most likely to receive no response at all to their inquiries. For the much smaller categories of negative responses and requests for more information, single parents led. Considering these last two response types jointly, single parents were significantly more likely to get a negative response or a request for more information than heterosexual couples.

[Table One about here]

We adjust for the effects of control variables on the likelihood of receiving a positive response through multivariate logistic modeling. The likelihood of receiving a positive response is contrasted with non-responses, negative responses, and requests for more information. While the latter category meant the apartment might still be available, it placed an extra hurdle (e.g. phoning, getting a credit check completed, etc.) before determining availability relative to a simple positive response.

Corresponding to the research design, using separate teams to collect data within each region, we ran the logistic models in Stata and clustering by region (Stata, 2010). We weighted the results to the proportion of total metropolitan rental stock available within each municipal area in order to better reflect the rental market as a whole. Models remained relatively robust to weight specifications and error assumptions, and analyses run using probit modeling in place of logistic modeling provided similar results to those reported here.
Logistic model results are provided in table two. Model one roughly corresponds to the descriptive results in table one, but adds control variables. Model two adds zones of familiarity with different types of new families, and interacts these zones with the new family scenarios to see whether or not location influences landlord response in line with the contact hypothesis. Model three divides the city up into the three zones discussed above, comparing the two new family familiarity zones to the third, suburban zone, where children are most represented in the population. In each model, there was evidence of significant discrimination in the rental market.

In model one, the likelihood of receiving a positive response was particularly low for same-sex male couples and for single parents (both mothers and fathers) compared to heterosexual couples. By contrast, same-sex female couples did not receive significantly different responses from heterosexual couples. Various characteristics of the rental listing also influenced the likelihood of receiving a positive response. Pricier units, relative to local median prices, were more likely to provide positive responses to inquiries, possibly reflecting the lack of competition for expensive dwellings. Two-bedroom units were also more likely to provide positive responses, which may reflect the preference of those renting one-bedroom units for single person households. Models interacting these controls with scenarios (not shown, but available from the primary author upon request) revealed no significant interactions between two bedroom apartments and scenarios, implying that landlords did not automatically decide that some relationships fit into the bedroom capacities of their units differently than others. The relationship between relative price of units and likelihood of a positive response did not grow stronger for new family scenarios and was even attenuated for some scenarios (same-sex women
couples and single fathers), indicating that landlords attempting to market expensive apartments were no less willing to discriminate based on family type\textsuperscript{4}.

\begin{table}
\null
\end{table}

In model two, we added dummy variables for zone within the metropolitan area of Vancouver. As mentioned previously, landlords operating in the Westside of Vancouver and Downtown were assumed to have the greatest likelihood of contact or familiarity with same-sex couples. Those operating in the Eastside and Burnaby and New Westminster were assumed to have the greatest contact or familiarity with single parents. These two zones of familiarity were compared to those living in remaining, more suburban regions of the metropolitan area included in the study, where children were most familiar. Generally speaking, inquiries made to apartments listed in the zones of familiarity with new families were less likely to receive a positive response than for elsewhere in the metropolitan area of Vancouver. This may reflect greater competition for apartments (tighter demand) in these very central regions of the metropolitan area relative to more peripheral locations.

Accounting for zones of familiarity for specific types of new family household, and interacting them with corresponding new family household scenarios revealed interesting relationships. Overall in these models same-sex men couples and single fathers continued to face significant

\begin{footnote}
\footnotesize
\textsuperscript{4} Inclusion of interaction terms for price and number of bedrooms had no notable effects on other coefficients in models, and so were not included in models presented here. The significance of interaction terms for same-sex women couples and single-fathers may relate to slightly higher average prices of apartments applied to for these groups, despite random assignment procedures.
\end{footnote}
discrimination relative to heterosexual couples. However, single mothers did not differ significantly in the responses they received from heterosexual couples. Within their zone of familiarity, same-sex men couples were significantly more likely to receive a positive response than outside of the zone, broadly supporting the contact hypothesis. This pattern was surprisingly inverted for the single mother scenario. Single mothers were significantly less likely to receive a positive response to their inquiries within the zone of single parent familiarity than outside of the zone. From the model results, it seems clear that the zones of the metropolitan area of Vancouver where single mothers were the most represented were also the zones where they were most likely to face discrimination.

In model three, we added interactions with all non-heterosexual scenarios for both zones outside the suburban zone. This reduced the overall power of the analysis relative to comparisons made in model two, but allowed for a more careful exploration of whether or not the divergent representation of children mattered between zones of familiarity, especially with regard to the reception of single parents. Here the direct effects estimated for scenarios correspond to their effects within the suburban zone, while the interacted effects estimate differences in the effects of scenario in the same-sex zone and single parent zone relative to the suburban zone. The direct effects reveal that in the suburban zone, where children were most present, same-sex men couples and single fathers were significantly less likely to receive a positive response than heterosexual couples, but there were no significant differences between the reception of heterosexual couples and same-sex women couples or single mothers. Interactions reveal that relative to the suburban zone, being in the same-sex familiar zone seemed to boost the likelihood
of a positive reception for same-sex men couples, but no longer to a statistically significant extent, likely reflecting the reduction in power and the weakened base category in this model\(^5\). Being in this zone, where children were the least well represented across the metropolitan area, had no significant effects on the likelihood of receiving a positive response by single parent status or for same-sex women couples. By contrast, within the zone of single parent familiarity, single mothers remained significantly less likely to receive a positive response than in the suburban zone. Once again, single mothers were most likely to face discrimination in the places where they were most overrepresented as a type of family, rather than in the places where children were most or least represented in the population. The relative representation of children within zones had no obvious effect on response by scenario. Nevertheless, a larger sample size might reveal more nuanced differences between regions.

In chart one, we used the model results (models one and two) to estimate the expected difference in the likelihood of a positive response for a median priced two bedroom apartment by scenario. We contrasted the overall differences in the likelihood of a positive response with the differences in the regions where landlords were expected to be most familiar with new family types described here. Overall estimates indicated that same-sex male couples saw the greatest rental discrimination in this study, and were nearly 25% less likely to receive a positive response to a typical apartment inquiry (median-priced, two-bedroom) than comparable heterosexual couples. Yet the disadvantage of same-sex male couples decreased significantly when they were looking for apartments in places where they were most likely to be familiar residents, though they

\(^{5}\) By contrast, using the single-parent zone as base, results not shown, same-sex men couples remain significantly more likely to receive a positive response in the same-sex familiar zone.
remained almost 10% less likely than heterosexual couples in the sample to receive a positive response there.

For single mothers, this situation was reversed. In the zone where single mothers should have been most familiar to landlords and rental authorities, they received the lowest positive response rates. Here they were over 25% less likely to receive a positive response than heterosexual couples, according to model estimates. This made single mothers significantly worse off in the places where they were most likely to live relative to metropolitan Vancouver as a whole, where they experienced just under a 15% disadvantage in response rates relative to heterosexual couples. Differences between regions were not as great for single fathers, but overall they continued to face significantly lower likelihoods of receiving positive responses (between 15% and 20%) than heterosexual couples regardless of where they lived.

[Chart One about here]

We briefly turn to a more qualitative exploration of the content of the relatively small sample of negative responses and requests for more information. We received a total of 57 negative responses and 39 requests for more information. In no cases from this sample did landlords attempt to steer potential tenants to alternative apartments from the one posted, likely reflecting the fact that most landlords in Vancouver own few properties and the vacancy rate remains quite low across the metropolitan region. Most often, negative responses to inquiries explicitly stated that the rental unit was already taken. From this, little information could be gleaned. Some 16
negative responses were more explicit in stating that the unit was too small for two people. The logic of these responses all made reference to two people in the abstract rather than referring to any particular household type, corresponding to human rights codes which allow maximum occupancy rules to exclude certain households by size, but disallow discrimination by family status. Two negative responses did refer to household types. In a response to the single mother scenario from the Eastside of Vancouver, one landlord responded, “Sorry Kate, we’re only looking for a single or married couple right now. Thanks for your interest and good luck in your search.” Here a single parent was denied where a single person or married couple would have been preferred. This was a relatively clear-cut case of discrimination based on family status, and would likely be treated as such under the B.C. Human Rights Code. Nevertheless, it is difficult to tell whether or not the discrimination is based upon the mother being single (relative to the married couple), the mother being attached to a child (relative to the single) or both together. In response to a single father scenario, a landlord from the Fraser Valley responded, “Kevin and Matt --- The suite situation is not really suitable for a child.” Here the presence of a child seems more directly problematic rather than the attachment of the child to a single parent. Either way, basing the rejection on the presence of a child (as opposed to a maximum occupancy) as the basis for denying a tenant remains problematic under anti-discrimination legislation.

In the requests for more information, most responses simply asked the inquiring party to call the rental authority directly. This may indicate simple landlord preference in modes of communication, but could also plausibly suggest some landlords wished to more informally evaluate candidates, off the written record, before providing a response of availability. However,
sometimes other information was offered. A Westside response to the single mother scenario notes, “Thank you Kate I’ll let you know if it’s still available and we’ll think about if kids are suitable. We have never had children in the suite before. I’ll keep in touch.” Again, here the implication is the children are perceived as possibly problematic, rather than their association with a particular parental marital status. Yet both single parent scenarios also received nearly identical suggestions that credit checks would be necessary before determining apartment availability in the Eastside of Vancouver and in Burnaby, conditions not stated in responses to other scenarios. Here it would seem that single parents were treated as possibly less able to pay their bills relative to other households, a situation which would seem to have little to do with the overall presence of children, but perhaps more to do with the particular financial circumstances expected of single parents. Overall, single parents received far more requests for more information and discouragingly ambiguous notes about the availability of apartments than other scenarios.

DISCUSSION

The results of our analysis confirm that there is significant rental discrimination against new family households in the Vancouver metropolitan area as a whole. Our data suggest that discrimination is particularly likely against same-sex male couples, who were about 24% less likely to receive a positive response from inquiries than heterosexual couples in this study. Discrimination against same-sex male couples mostly takes the form of non-response, making it less likely these households would recognize the discrimination. This finding accords with both
Ahmed and Hammarstedt's (2009) study revealing significant discrimination in Sweden of remarkably similar magnitude, and Heckman's (2009) revelation that few homosexuals feel they have experienced discrimination.

Differences in responses to new family households by geographic location support the “contact hypothesis” for same-sex male couples. Landlords operating in the Downtown and Westside of Vancouver, home to an organized gay enclave and a well educated population, demonstrate much less discrimination against same-sex male couples than other regions. More people living in these regions presumably know gay men. For landlords operating in this area, this may decrease their own prejudice, and may also decrease their concerns about the prejudice of neighbors and other tenants. There may also be more gay landlords in this area than in other areas. This may reinforce, to some extent, the usefulness of gay enclaves. Disadvantages faced by same-sex male couples in the housing market seem to be less intense in places where gay men cluster together and organize. Yet there is also evidence that these communities tend to have gentrifying effects, working to exclude those households with lower incomes (Knopp, 1990). Indeed, the regions most accepting of same-sex male couples in this study were also the most expensive regions in the city. It is also worth noting that the concentration of gay men in enclaves may reduce the likelihood of the broader population making “contact” with gay men.

Same-sex women partners did not experience significant discrimination in this study. This finding accords again with study results from Sweden (Ahmed, et al., 2008). It is difficult to tell from our data why same-sex women couples do not seem to experience discrimination as
prospective tenants in the rental market. Results may reflect more widespread acceptance of this new family form relative to others (Kite & Whitley, 1996). Alternatively, they may relate to landlord perceptions that women make better tenants overall (Ahmed & Hammarstedt, 2008). Regardless, it is important to acknowledge that researchers suggest lesbians, and women in general, may face a variety of other forms of discrimination and harassment extending beyond initial contact with landlords (Novac, et al, 2002; Roscigno, et al, 2008). Of relevance to the contact hypothesis, same-sex couples of women seemed to do better in some parts of the metropolitan area than others, but differences did not reach statistical significance. This may reflect the rough nature of our estimates of where certain communities were likely to be overrepresented in the metropolitan area. Ley & Dobson (2008), for instance, note the prominent presence of a working class lesbian community in East Vancouver that we may have missed with our measures.

Single parents in our sample were more likely to face discrimination than same-sex female couples, but generally less likely to face discrimination than same-sex male couples. Overall, single fathers were about 16% less likely and single mothers 14% less likely to receive a positive response to inquiries relative to heterosexual couples. In both cases, these differences were statistically significant. Relative to past studies (Galster & Constantine, 1991) this study provides more convincing evidence that single mothers face discrimination in the housing market based upon their family status (the presence of a child and/or lack of a spouse), and this the first study we are aware of that demonstrates similar levels of discrimination against single fathers. It
is clear that discrimination results in barriers to securing housing for many new family households.

Geographic concentration does not seem to hold any advantages for single parents in the way it might for same-sex couples. The Eastside of Vancouver and Burnaby/New Westminster contain the largest proportion of single parents, but landlords operating here are no less likely to discriminate against them than other areas. Indeed, results suggest that single mothers face significantly greater barriers to fair treatment in this region of metropolitan Vancouver than in others. This is a striking finding, running against a simple model of the contact hypothesis, which presumes that as more landlords come to know single mothers, fewer landlords will feel prejudiced against them. One possible explanation for this finding might be that statistical discrimination is primarily at work against single mothers, rather than discrimination based upon other forms of prejudice.

Theoretically, statistical discrimination against single mothers might have two bases. First, it might be based solely on the presence of children. Landlords may have developed ideas about how children make bad tenants based upon previous experience with children. To the extent children really do make bad tenants, more experience with children as tenants will make landlords less likely to select them. However, landlords are likely to have had most experience with children in the outlying suburbs, and single mothers do not seem to suffer great discrimination there. Moreover, the differences in the reception of single mothers and single fathers by region provide some evidence that it is not simply the presence of children that
matters, but ideas about the relationship between child and adult. Discrimination against single mothers is most acute in the zone where single parents are most common, whilst discrimination against single fathers is relatively diffuse.

More intriguingly, landlords more often encountering single mothers might develop particular ideas about how single mothers make bad tenants. This may relate to the overrepresentation of single mothers in social welfare programs, in conjunction with 2002 welfare reforms that have left single mothers increasingly unable to afford to be “good tenants” (Fuller, et al, 2008). In a 2005 survey of landlords, Vancouver landlords were the most likely to suggest that rent collection, tenant quality, and property safety were their biggest concerns (CMHC, 2005). The survey of landlords mentioned earlier suggests that they find single parents the least likely to meet these concerns (Pomeroy, 2001). Within the population of single parents, single fathers are relatively more advantaged in the labor market, and are also less likely to be familiar to landlords than single mothers. As a result, while they may face greater overall discrimination (perhaps on the basis of their unfamiliarity), they show less evidence of facing statistical discrimination. Qualitative evidence from this study supports the idea that landlords were especially concerned about the ability of single parents to pay, and sought more reassuring information from single parents than from other candidates. It is also worth noting that the marginalization of single mothers also likely makes them less able to organize in the way the gay, lesbian, bisexual, transgendered and queer community has. This suggests that the broader structural disadvantages faced by single mothers work against reducing discrimination against them in the housing market.
Further study of discrimination by family type would be useful. In particular, it would be interesting to attempt to demonstrate more clearly the degree to which children are discriminated against, and whether two parent households receive different responses than one parent households, although as we have suggested, the complicating factor of household size represents a challenge in this regard to insuring all else remains equal. Further study might also explore the geography of discrimination in much greater detail. In particular, it bears examining whether or not there are clear tipping points in neighborhood family type composition beyond which particular family types find themselves advantaged or disadvantaged. The presence of tipping points may reflect the processes noted above insofar as representation of a group may be linked to interpersonal exposure to group members (e.g., Choi, et al, 2005). Yet tipping points might also reflect processes of social closure, and attempts to keep out groups seen as threatening to neighborhood dynamics once they reach particular population thresholds (Fischer & Massey, 2004; Tilly, 1998). This latter interpretation of tipping points is far more associated with the racialization of neighborhoods in the literature (e.g., Card, et al, 2008), but it is worth investigating in further detail whether or not landlords actively work to keep some family types from attaining a critical mass deemed threatening within local neighborhoods.

The approach used to measure discrimination here has advantages and drawbacks. Electronic communications allow for a great many inquiries to be made cheaply of a great many landlords, making it unnecessary to rely upon matched testers in order to gauge the degree of discrimination at work in rental markets. At the same time, the approach advocated here is very
shallow. The present study focuses only on the initial contact of landlords, while many audit studies expand the range of discrimination studied to include the entire process of applying for an apartment. As noted above, the site of the present study is in a fairly liberal city located in a fairly liberal country. The study took place during a time when vacancies were rising, possibly making landlords less choosy than normal. For all of these reasons, the present study should be treated as a relatively conservative estimate of discrimination in the rental market. Broader studies, including more culturally conservative areas, might better demonstrate the full extent of discrimination by family type. Other methodological approaches, including qualitative interviews, focus groups, and more experimental designs working with landlords might also more directly address the decision-making processes behind discrimination.

CONCLUSION

The present study contributes to the literature by documenting discrimination on the basis of family type within North America. It is the first large-scale study we know of to study the effect of being in a same-sex partnership on rental discrimination in North America. It is also the first to study the effect of being a single parent relative to other types of two-person family households, exploring both single mothers and single fathers.

Social change may be operating in such a way as to gradually reduce the discrimination faced by new family households. This study provides further evidence that same-sex female couples receive no different treatment than comparable heterosexual couples. Moreover, in areas where landlords were more likely to come into contact with same-sex men couples, they were less
likely to discriminate against them. This constitutes an encouraging pattern, but this pattern should not be taken for granted as applying to all new family households. In particular, single parents may be facing increasing discrimination, especially of the statistical form, following their growing economic marginalization. Both legal protections in the rental market, and more widespread reevaluation of current family welfare policies may be needed to reduce discrimination against single mothers. Overall, evidence suggests that legal protections for same-sex couples and single parents may be useful, and monitoring of discrimination against new family households should continue. Fortunately, methods like the one used here provide a relatively easy way to insure that monitoring remains feasible.
BIBLIOGRAPHY


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TABLE ONE. Percent Receiving Response, by Scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Positive Response</th>
<th>No Response</th>
<th>Negative Response</th>
<th>Request for Info</th>
<th>Negative Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterosexual couple (N=366)</td>
<td>61.2%</td>
<td>33.9%</td>
<td>2.8%</td>
<td>2.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>(230)</td>
<td>(119)</td>
<td>(10)</td>
<td>(7)</td>
<td>(17)</td>
</tr>
<tr>
<td>Same-sex male couple (N=330)</td>
<td>49.4%***</td>
<td>46.2%***</td>
<td>2.8%</td>
<td>1.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>(168)</td>
<td>(146)</td>
<td>(11)</td>
<td>(5)</td>
<td>(16)</td>
</tr>
<tr>
<td>Same-sex female couple (N=324)</td>
<td>62.6%</td>
<td>33.9%</td>
<td>2.5%</td>
<td>1.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td>(207)</td>
<td>(104)</td>
<td>(9)</td>
<td>(4)</td>
<td>(13)</td>
</tr>
<tr>
<td>Single mother (N=328)</td>
<td>54.1%*</td>
<td>37.8%</td>
<td>4.4%</td>
<td>3.7%</td>
<td>8.1%+</td>
</tr>
<tr>
<td></td>
<td>(190)</td>
<td>(113)</td>
<td>(13)</td>
<td>(12)</td>
<td>(25)</td>
</tr>
<tr>
<td>Single father (N=321)</td>
<td>53.6%*</td>
<td>38.4%</td>
<td>4.3%</td>
<td>3.7%</td>
<td>8.0%+</td>
</tr>
<tr>
<td></td>
<td>(177)</td>
<td>(119)</td>
<td>(14)</td>
<td>(11)</td>
<td>(25)</td>
</tr>
<tr>
<td>Total (N=1,669)</td>
<td>57.2%</td>
<td>36.9%</td>
<td>3.4%</td>
<td>2.5%</td>
<td>5.9%</td>
</tr>
<tr>
<td></td>
<td>(972)</td>
<td>(601)</td>
<td>(57)</td>
<td>(39)</td>
<td>(96)</td>
</tr>
</tbody>
</table>

Note: Percentages weighted by rental representation of municipal area as in Appendix One (unweighted numbers below). Significance recorded for one-tailed fisher’s exact test of whether weighted distribution is statistically different than for heterosexual couples:  + p < 0.10,  * p < 0.05, ** p < 0.01, *** p < 0.001
TABLE TWO. Logistic Model Results: Likelihood of Receiving a Positive Response (N=1669)

<table>
<thead>
<tr>
<th>Model One</th>
<th>Model Two</th>
<th>Model Three</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model One</strong></td>
<td><strong>Model Two</strong></td>
<td><strong>Model Three</strong></td>
</tr>
<tr>
<td><strong>Odds Ratio</strong></td>
<td><strong>S.E.</strong></td>
<td><strong>Odds Ratio</strong></td>
</tr>
<tr>
<td>Heterosexual Couple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men Couple</td>
<td>0.60</td>
<td>*** 0.08</td>
</tr>
<tr>
<td>Women Couple</td>
<td>1.08</td>
<td>1.04</td>
</tr>
<tr>
<td>Single Mother</td>
<td>0.74</td>
<td>* 0.09</td>
</tr>
<tr>
<td>Single Father</td>
<td>0.70</td>
<td>** 0.08</td>
</tr>
<tr>
<td>Two Bedroom</td>
<td>1.77</td>
<td>*** 0.22</td>
</tr>
<tr>
<td>Price Difference</td>
<td>1.12</td>
<td>*** 0.03</td>
</tr>
<tr>
<td>Day One</td>
<td>2.01</td>
<td>*** 0.34</td>
</tr>
<tr>
<td>Same-sex familiar zone</td>
<td>0.52</td>
<td>*** 0.06</td>
</tr>
<tr>
<td>Single parent familiar zone</td>
<td>0.72</td>
<td>*** 0.08</td>
</tr>
<tr>
<td>Suburban child zone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same-sex zone x men couple</td>
<td>1.60</td>
<td>*** 0.23</td>
</tr>
<tr>
<td>Same-sex zone x women couple</td>
<td>1.22</td>
<td>0.50</td>
</tr>
<tr>
<td>Same-sex zone x single mom</td>
<td>0.67</td>
<td>0.18</td>
</tr>
<tr>
<td>Same-sex zone x single dad</td>
<td>1.22</td>
<td>0.35</td>
</tr>
<tr>
<td>Single parent zone x single mom</td>
<td>0.63</td>
<td>** 0.10</td>
</tr>
<tr>
<td>Single parent zone x single dad</td>
<td>0.92</td>
<td>0.13</td>
</tr>
<tr>
<td>Single parent zone x men couple</td>
<td>1.00</td>
<td>0.26</td>
</tr>
<tr>
<td>Single parent zone x women couple</td>
<td>1.41</td>
<td>0.30</td>
</tr>
</tbody>
</table>

N: 1669 | 1669 | 1669

Log
Pseudolikelihood: -1097.06 | -1084.19 | -1082.45
Pseudo R2: 0.0371 | 0.0502 | 0.0499

Note: All models clustered by municipal area (nine areas) and weighted according to Appendix One. For models two and three, the city is divided into three mutually exclusive zones, with the suburban zone providing the baseline. In model two, direct effects of scenario refer to effects estimated outside of relevant zone of familiarity. The interactive effects estimate the difference between reception within relevant zone of familiarity relative to outside of relevant zone of familiarity. In model three, direct effects of scenario refer to effects estimated in the suburban child zone. Interactive effects estimate differences between reception in specified zones and reception in the suburban zone.
Note: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001
CHART ONE. Percent Difference from Heterosexual Couple in Model Estimated Likelihood of a Positive Response, Overall and by Zone of Familiarity (Estimated for Median Priced 2BR Apartment)
APPENDIX ONE. Municipal Areas, Family Characteristics, Rents, Weights, and Inquiries

<table>
<thead>
<tr>
<th>Municipal Area</th>
<th>% Couples Common-Law</th>
<th>% Family Lone Parents</th>
<th>% Pop. Under 15</th>
<th>% HHs Renting</th>
<th>Rental Weight</th>
<th>1BR Apt</th>
<th>2BR Apt</th>
<th>Inquiries Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Vancouver</td>
<td>33%</td>
<td>11%</td>
<td>6%</td>
<td>70%</td>
<td>1.073</td>
<td>1400</td>
<td>1650</td>
<td>194</td>
</tr>
<tr>
<td>Westside Vancouver</td>
<td>16%</td>
<td>14%</td>
<td>13%</td>
<td>48%</td>
<td>1.354</td>
<td>1200</td>
<td>1475</td>
<td>204</td>
</tr>
<tr>
<td>Eastside Vancouver</td>
<td>12%</td>
<td>19%</td>
<td>15%</td>
<td>45%</td>
<td>1.468</td>
<td>880</td>
<td>1200</td>
<td>209</td>
</tr>
<tr>
<td>Burnaby/New West</td>
<td>11%</td>
<td>17%</td>
<td>15%</td>
<td>40%</td>
<td>1.267</td>
<td>850</td>
<td>1300</td>
<td>180</td>
</tr>
<tr>
<td>Surrey</td>
<td>9%</td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
<td>1.104</td>
<td>657</td>
<td>950</td>
<td>210</td>
</tr>
<tr>
<td>Richmond/Delta</td>
<td>7%</td>
<td>14%</td>
<td>17%</td>
<td>22%</td>
<td>0.640</td>
<td>1000</td>
<td>1350</td>
<td>142</td>
</tr>
<tr>
<td>North Shore</td>
<td>11%</td>
<td>15%</td>
<td>16%</td>
<td>29%</td>
<td>0.626</td>
<td>1100</td>
<td>1400</td>
<td>135</td>
</tr>
<tr>
<td>Tri-Cities</td>
<td>11%</td>
<td>15%</td>
<td>18%</td>
<td>24%</td>
<td>0.549</td>
<td>850</td>
<td>1200</td>
<td>193</td>
</tr>
<tr>
<td>Fraser Valley</td>
<td>12%</td>
<td>14%</td>
<td>20%</td>
<td>23%</td>
<td>0.918</td>
<td>850</td>
<td>1050</td>
<td>201</td>
</tr>
</tbody>
</table>

1 Household Data, Statistics Canada

2 Based on proportion of total rental stock in metropolitan area contained in municipal area, using Household Data, Statistics Canada

3 Based on sample
APPENDIX TWO. Inquiry Scenarios

Research teams cycled through scenarios as follows:

**Scenario A:** Hi, my name is Matt, and my partner and I saw your listing for a (#) bedroom (apartment-suite) on [marketplace website]. We are non smokers and don’t have any pets or kids. I’m a teacher and she’s enrolled in a professional program. Please let us know if the (apartment-suite) is still available and if we can view it. Thanks, Matt and Kate

**Scenario B:** Hi, my name is Matt, and my partner and I saw your listing for a (#) bedroom (apartment-suite) on [marketplace website]. We are non smokers and don’t have any pets or kids. I’m a teacher and he’s enrolled in a professional program. Please let us know if the (apartment-suite) is still available and if we can view it. Thanks, Matt and Kevin

**Scenario C:** Hi, my name is Melissa, and my partner and I saw your listing for a (#) bedroom (apartment-suite) on [marketplace website]. We are non smokers and don’t have any pets or kids. I’m a teacher and she’s enrolled in a professional program. Please let us know if the (apartment-suite) is still available and if we can view it. Thanks, Melissa and Kate

**Scenario D:** Hi, my name is Kate, and my son and I saw your listing for a (#) bedroom (apartment-suite) on [marketplace website]. We are non smokers and don’t have any pets. I’m a teacher and he’s enrolled in the third grade. Please let us know if the (apartment-suite) is still available and if we can view it. Thanks, Kate and Matt

**Scenario E:** Hi, my name is Kevin, and my son and I saw your listing for a (#) bedroom (apartment-suite) on [marketplace website]. We are non smokers and don’t have any pets. I’m a teacher and he’s enrolled in the third grade. Please let us know if the (apartment-suite) is still available and if we can view it. Thanks, Kevin and Matt
APPENDIX THREE. Weighted Descriptive Statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>positive</td>
<td>57.2%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Heterosexual couple</td>
<td>21.6%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Same-sex male couple</td>
<td>19.8%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Same-sex female couple</td>
<td>19.5%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Single mother</td>
<td>19.8%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Single father</td>
<td>19.2%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Two bedroom (vs. one)</td>
<td>53.1%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Price difference (vs. median)</td>
<td>$2.76</td>
<td>-765</td>
<td>850</td>
</tr>
<tr>
<td>Day One</td>
<td>8.0%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Same-Sex Familiar Zone</td>
<td>27.0%</td>
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<td>1</td>
</tr>
<tr>
<td>Single Parent Familiar Zone</td>
<td>30.4%</td>
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<td>1</td>
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</tbody>
</table>

N=1,669