

The City Through Her Eyes: Gender-Based Harassment in Public Spaces in Urban India*

Lori Beaman[†] Seema Jayachandran[‡] Anisha Sharma[§]

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Abstract

Gender-based harassment in public spaces affects women directly through victimization and indirectly through fear. We measure these dual effects in urban India, where harassment is widely regarded as pervasive. Surveying over 4,000 women recruited in public spaces in New Delhi and Bengaluru, we document that 65% of women in New Delhi and 29% in Bengaluru experienced harassment in public spaces in the past year. Past-year prevalence of groping, stalking, or sexual assault is 41% in New Delhi and 14% in Bengaluru. Both frequent, less severe forms of harassment and rarer, more severe forms generate anxiety among women; for example, 46% of women in New Delhi and 25% in Bengaluru report feeling extremely anxious about sexual assault when in public spaces. Not all of the indirect effects track the across-city variation in experienced harassment: in both cities, roughly 70% of women report that fear of harassment affects whether they work. Finally, on measurement, we show that measured prevalence is more sensitive to questionnaire design where harassment is less common and victims have fewer and less recent incidents to recall.

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[†]Northwestern University, Department of Economics (l-beaman@northwestern.edu)

[‡]Princeton University, Department of Economics (jayachandran@princeton.edu)

[§]Ashoka University, Department of Economics (anisha.sharma@ashoka.edu.in)

1 Introduction

Gender-based harassment in public spaces is a global phenomenon, with women the predominant victims. Yet research on violence against women has concentrated on intimate partner violence and, more recently, harassment in the workplace (García-Moreno et al., 2006; Folke and Rickne, 2022). The harassment women face on streets, in markets, and on public transit — the spaces they must move through daily — has received less systematic attention. Much of what is known comes from advocacy organizations and multilateral agencies, whose prevalence surveys first placed the issue on the policy agenda (UN Women and International Center for Research on Women, 2013; European Union Agency for Fundamental Rights, 2014; ActionAid, 2016), and, within economics, from a growing body of evidence linking harassment risk to women’s education, mobility, and labor supply (Borker, forthcoming; Kondylis et al., 2025; Siddique, 2022). In this paper, we rigorously measure the prevalence of harassment in public spaces in two cities in India and document how women’s self-reported anticipation of harassment shapes their well-being and economic choices.

Estimating the prevalence of harassment in public spaces is challenging. A recent systematic review of 54 quantitative studies found that most evidence relies on convenience or student samples, recall periods are inconsistent, and measured prevalence varies widely depending on how questions are asked (Keel, Stewart, and Mellberg, 2024). A deeper challenge is that reported harassment reflects not only exposure but also disclosure: women’s willingness to report is shaped by stigma and reputational concerns (Dhillon and Bakaya, 2014; Talboys et al., 2017), and many women may not label their experiences as “sexual harassment” at all (Magley et al., 1999). This is particularly salient in India, where the commonly used term “eve-teasing” frames behaviors ranging from verbal harassment to physical contact as trivial (Baxi, 2001; Zietz and Das, 2017).

Our survey design responds to these challenges, following best practices from the survey literature on measuring violence against women (Fitzgerald, Gelfand, and Drasgow, 1995; Fisher, Cullen, and Turner, 2000; García-Moreno et al., 2006). We ask about specific behaviors (unwanted staring, catcalls, groping, flashing, etc.), rather than about “sexual harassment” as an umbrella category, so that reporting does not depend on whether a woman labels a behavior as harassment. We use a fixed one-year recall window

and field an identical instrument in two cities. To measure harassment among women actually exposed to public spaces, we use a venue-based sampling approach (Muhib et al., 2001) and recruit respondents at randomly sampled bus stops, metro stations, and markets. We validate the resulting sample against a census of women present at the same sites. This design measures the rate at which women are harassed conditional on being in public, which is the risk a woman faces when she leaves her house, rather than the population prevalence, which is mechanically lowered by the costly avoidance behavior that harassment itself induces.

We survey over 4,000 women in New Delhi and Bengaluru. Nearly two-thirds (64.5%) of women in New Delhi (hereafter, Delhi) report experiencing gender-based harassment in public spaces in the past year. In Bengaluru, the figure is 29%: much lower, but still high. These are not just “minor” incidents: 40.7% of women in Delhi and 14.5% in Bengaluru experienced groping, stalking, or sexual assault in public spaces in the last year. The incidents occur overwhelmingly during the daytime, and in locations where others are present, highlighting the limited scope for women to further reduce their exposure.

Beyond its direct incidence, harassment indirectly harms women through the anxiety and fear it induces (Vera-Gray, 2016). In qualitative interviews we conducted alongside the surveys, women spoke about this burden.¹ One respondent described the constant vigilance required on a routine commute: “I never sleep on the bus – someone might touch me inappropriately and go. I stay awake and alert at all times.” For another respondent, anxiety colored her encounters with strangers: “Whenever I pass a man on a bike or car, I am very careful, in case he has acid or a knife.” A third captured how the threat of harassment restricts daily mobility: “We have to think 10 times before leaving the house while men don’t have to.”

The survey data reveal that such sentiments are widely held and consequential. About 71% of women in Delhi and 68% in Bengaluru say the fear of harassment is “very important” or “somewhat important” in their decision whether to work. Among women who work or have previously worked outside the home, 84-87% say the same about where to work. The striking finding is the similarity across cities: despite preva-

¹We conducted 9 interviews in Delhi and 4 interviews in Bengaluru. The interviewees were a convenience sample of survey respondents who agreed to an interview with open-ended questions.

lence rates that differ by more than a factor of two, the reported impact on labor market decisions is nearly identical. This is suggestive that harassment might be a first-order consideration in women’s labor market choices once prevalence exceeds a threshold that both cities clear.

The responses about work decisions stand in contrast to self-reported day-to-day anxiety, where we observe a gradient between the cities that aligns with Bengaluru’s lower victimization rate. Severe forms of harassment generate especially high levels of anxiety for women when they are in public spaces (44-46% of women in Delhi and 17-25% of women in Bengaluru report being “extremely anxious” about them). Women’s anxiety tracking the gravity of the potential incident more than its likelihood is consistent with the heavy psychological and, in some cases, physical toll of such assaults (Rollison et al., 2023). But women report feeling anxious about less severe forms of harassment too, and it is clear that the welfare costs are borne not only through experienced incidents but through the anticipation of them. The possibility of being harassed shapes how women experience public spaces.

Our findings connect to the literature on the costs of unsafe public spaces for women. The evidence closest to ours is the baseline survey of Amaral et al. (2025), who document high rates of street harassment in Hyderabad in the course of evaluating a policing intervention; our contribution is prevalence measurement designed to be representative of women in a city’s public spaces and comparable across cities. A second strand infers the cost of harassment risk from women’s choices: women accept lower-quality colleges for safer commutes (Borker, forthcoming), pay for women-reserved transit (Aguilar, Gutiérrez, and Soto Villagrán, 2021; Kondylis et al., 2025), and increase job search when offered safer transport (Garlick, Field, and Vyborny, 2025). We complement this revealed-preference evidence by directly eliciting the fear and how it drives these choices. Finally, our results speak to the puzzle of low and stagnant female labor force participation in urban India (Klasen and Pieters, 2015; Fletcher, Pande, and Moore, 2019; Jayachandran, 2021; Siddique, 2022): the fear of harassment is a quantitatively important constraint on both whether and where women work.

2 Description of survey and study sites

2.1 Questionnaire

We designed the survey instrument to parsimoniously elicit women’s experiences of gender-based harassment in public spaces. No personally identifiable information was collected. After recording demographic characteristics, including marital status, education, religion, caste, and employment status, the survey asked respondents about experiences of harassment in public spaces.²

Respondents were asked separately about seven specific forms of harassment: unwanted sexual staring; lewd gestures or facial expressions; catcalls, songs, or jokes; stalking; unwelcome touching or groping; flashing; and sexual assault. For each form of harassment, respondents were asked whether they had ever experienced it and how recently. We asked more detailed follow-up questions about the most recent incident, administering this module to a random subsample to limit the burden on respondents. The follow-up questions covered whether the respondent was traveling alone, whether the incident occurred during the day or at night, and, in Bengaluru, the level of crowding in the public space.³

We also asked randomly selected respondents whether the risk of a particular type of harassment generates anxiety when traveling in public. In addition, all non-student respondents were asked how fear of harassment shaped their decision about whether to work, and those who work or previously worked outside the home were asked how it shaped where they worked. All respondents were asked if it limits participation in social activities and routine tasks such as household errands. Finally, respondents reported whether they had ever been harassed in specific types of locations, including educational institutions, workplaces, places of worship, health clinics, streets, transit stations, public transportation, and markets or shops. The survey took on average 7 minutes to complete.

In the analysis, we group reported harassment into two categories: severe and less

²Respondents were told that public spaces include schools, temples, hospitals, offices, streets, colleges, markets, shops, and public transportation.

³The follow-up module also asked about the respondent’s relationship to the perpetrator, how she reacted, whether she sought help, and whether anyone came forward to help, which we do not analyze in this paper.

severe. Severe harassment comprises groping, stalking, and sexual assault, while less severe harassment comprises unwanted staring, catcalls, lewd gestures, and flashing. This classification reflects differences in gravity under Indian law. The severe forms can be charged as non-bailable offenses (groping and sexual assault always, stalking on a repeat offense). The less severe forms are treated more lightly: catcalls, lewd gestures, and flashing are always bailable, while unwanted staring is not itself criminal, though it may become actionable when accompanied by other offenses.

A growing interdisciplinary literature highlights that measured prevalence of harassment reflects not only exposure but also processes of recognition and disclosure. First, evidence suggests that women’s willingness to disclose harassment, even in confidential surveys, is influenced by anticipated consequences. Qualitative and mixed-methods studies document that concerns about stigma, reputational harm, and family restrictions, alongside low expectations of effective institutional response, reduce incentives to report (Dhillon and Bakaya, 2014; Talboys et al., 2017). Second, many women may not label experienced behaviors as “sexual harassment.” The social psychology literature has demonstrated that whether a woman views an experience as harassment depends on her experiences, beliefs, and cultural context, and that women may avoid labeling to minimize psychological or social costs (Magley et al., 1999; Wilson and Miller, 2016).

Our survey design addresses several of the measurement challenges raised above, for example, by offering respondents the option to self-administer the tablet-based survey and asking about specific behaviors rather than whether they had experienced “sexual harassment” as an umbrella category.

2.2 Study sites

We surveyed 2,048 women in Delhi (November-December 2024) and 2,089 women in Bengaluru (March-April 2025).⁴

We approached women at selected public spaces that spanned bus routes, metro stops, and markets. The goal was to survey at locations with both a large number of women and diverse respondent profiles in terms of age and socio-economic background.⁵

⁴We also surveyed 1,863 women in Jaipur (May-June 2024) using a different questionnaire with screener questions about ever having experienced harassment in public spaces. Results are reported in Appendix C. In brief, Jaipur’s harassment prevalence lies in between Delhi’s and Bengaluru’s.

⁵Before launching the harassment survey, we conducted a small survey in Jaipur in February 2024

Our sampling strategy was designed to be representative of women who move through public spaces, rather than of all women who live in these cities. This deliberate choice allows us to measure the prevalence of harassment in public spaces among women who are directly exposed to it. Household-based surveys can measure the unconditional population prevalence, which will typically be lower: women who rarely leave the home report low levels of harassment because they have chosen to reduce their exposure. Since avoidance is itself a response to harassment, our estimates likely understate what women would face if all used public spaces equally.⁶

In Delhi, we first generated a list of public spaces to survey in, and then sampled from that list. Bus stops that served multiple bus routes and were not too close to colleges/student hostels were prioritized. Metro stations were sampled from a list of stations that served more than one line. Markets were selected based on having high foot traffic, variety of goods sold, and likelihood of finding women shoppers. Bus stops, metro stations, and markets were sampled from the list of public places to ensure that the five regions of Delhi (East, West, North, South, Central) had equal representation. Locations were sampled in the following ratio: 15 bus stops, 10 markets, and 5 metro stations. 50% of the sample in Delhi was interviewed at bus stops, 33% at retail markets, and 17% at metro stations.

In Bengaluru, we followed a similar process. Bus stops with a large number of routes running through them and metro stations close to other transportation infrastructure were prioritized, in order to maximize potential respondents. Markets were excluded if they were specialized markets unlikely to have many female customers, such as automobile parts. The study sites span all 8 zones of the Bengaluru metropolitan region. 58% of respondents were interviewed at bus stops, 32% at retail markets, and 10% at metro stations.

Data collection occurred throughout the day to maximize the diversity of women who to understand typical mobility patterns. Using door-to-door sampling, we surveyed 234 women, asking which public spaces they had visited in the previous three months, how frequently, at what times of day, who accompanied them, and what mode of transport they used. We used these data to help select venue types for the harassment survey, focusing on public spaces women reported visiting frequently, especially when unaccompanied by men.

⁶Our sample composition reflects the composition of women in specific public spaces, which may differ across venue types. For instance, metro stations tend to serve a more socio-economically advantaged population, including students, than bus stops or markets, so the mix of venues in our sample shapes the overall estimate. We discuss this further in footnote 9.

participated in the survey. Surveys were conducted in the morning (31%), afternoon (42%), and early evening, up to 7 pm (27%).

2.3 Characteristics of the sample

We approached women in the sampled public spaces and invited them to participate in the survey. The vast majority declined to engage with the enumerator, almost always before she could even mention the topic of women’s safety.⁷ Of the women we approached, 9% were willing to participate and were eligible, and an additional 3% were willing but did not meet our eligibility criteria.⁸ For students, we surveyed a randomly selected subset of those who agreed to participate to keep the sample more representative of women in public spaces; students agree to participate at a high rate. Of the women who met the criteria and consented, 73% were traveling or shopping alone; 19% were accompanied by other women; and 7.7% were accompanied by one or more men. Figures A1 and A2 show participation flowcharts for Delhi and Bengaluru, tracing how many women were contacted, screened for eligibility, deemed eligible, and surveyed.

Since the goal of the survey was to be representative of women in public spaces, our sample need not be representative of all women. Table 1 (columns 1-2) shows that about half of respondents in Delhi and 41% in Bengaluru are aged 25 or younger, and that 47% of respondents in Delhi and 58% in Bengaluru work outside the home. Our sample is therefore younger and more likely to be employed than the overall female population in the two cities. Among women aged 19 to 40 in the representative National Family Health Survey-5 (NFHS-5), fewer than 35% in urban Delhi and Bengaluru are 25 or younger (see Table B1). The Periodic Labour Force Survey from 2023-24 indicates that about 21% of women aged 19-40 worked outside of the home in urban Delhi, and 39% in urban Bengaluru. Our sample in both cities is also more likely to hold a bachelor’s degree than the full population. However, our sample is comparable to the population in terms of caste and religion: the vast majority of respondents are Hindu, and 10% in both cities are Muslim.

⁷Recording whether each refusal preceded or followed the mention of safety proved logistically difficult, so we cannot quantify this pattern.

⁸The eligibility criteria were: being female, aged 19-40, and a resident of the city for at least one month. The Bengaluru survey was additionally limited to respondents who could complete the survey in Kannada or English.

To assess whether our sample is representative of women in public spaces, we conducted a “shadow survey” at a sample of our study sites in Delhi and Bengaluru. The shadow survey counted and characterized the women in the public spaces at the times of day we conducted the harassment survey. For each woman counted, surveyors recorded her approximate age (under 18, 18-25, 26-30, 31-35, 36-40, over 40), whether she appeared to be a student, and whether she was alone, with other women, with men, or with a mixed group. This provides a demographic benchmark against which we can compare our survey respondents. Table B1 shows that our sample in both cities is somewhat younger than the population of women in the public spaces. This difference reflects that younger people were more likely to engage when our enumerators approached them and consent to the survey. However, the gap in ages between our harassment survey sample and the shadow survey population is much smaller than the gap with the NFHS-5 sample, reflecting that women in public spaces are younger than the general urban female population. Our sample somewhat overrepresents women traveling alone, likely because stopping to complete the survey kept no companions waiting.

3 Results

3.1 Prevalence of gender-based harassment

Figure 1, Panel (a), shows that almost two-thirds of women in Delhi report experiencing gender-based harassment in public spaces within the last year alone. 60% of women in Delhi report experiencing at least one of the less severe types of harassment (unwanted staring, catcalls, lewd gestures, and flashing), and 41% report experiencing at least one type of severe harassment (groping, stalking, and sexual assault). Note that women can experience multiple types of harassment in a given year.

In Bengaluru, women experience harassment in public spaces at high rates, though notably lower than in Delhi. 29% of women experienced some form of harassment in the past year. 25% experienced at least one incident of the less severe category, and 14% experienced a severe incident of harassment.

Looking beyond the past year, 72.4% of women in Delhi and 34.9% in Bengaluru report having ever experienced harassment in a public space (Table A1, Panel (a)). We

focus on harassment in the past year since a shorter recall period reduces measurement error, particularly for less severe forms of harassment. Prevalence of harassment in the past year is also more reflective of current conditions and, hence, more relevant for policy.

Figure 1 (Panel (b)) gives the percentages for each specific type of harassment for both cities. Staring affects the most women, in both cities, followed by groping and then catcalls.

3.2 Who is being harassed?

Table 1, columns 3 and 4, summarizes gender-based harassment rates by age, education, occupation, caste, and religion for both cities. In brief, younger and more educated women face the most harassment, while women who do not work outside the home face the least. Harassment is reported at similar rates for women of all castes and religions.

Among women aged 19-25, 73-81% experienced harassment in the last year in Delhi, and 32-43% in Bengaluru. Students report very high rates of experiencing harassment in Delhi, at 84%, followed by women who work outside the home, at 70%. 50% of women who either are not active in the labor force or work from home nevertheless experienced harassment in public spaces during the previous year. In Bengaluru, while students report the highest harassment rates, the prevalence is more similar across the three occupation categories than in Delhi.

In Delhi, women’s reported experiences vary by educational attainment. Women who have completed at least secondary school (12th standard) report higher rates of harassment (72% compared to 41% for women with less than 12th standard). In Bengaluru, women with the most education also report higher rates of harassment, but the differences are much smaller (33% compared to 23%).⁹

How women classify incidents may vary systematically with their demographics, such as education. Table A1 (Panel (c)) sheds some light on whether the gradient by education reflects actual differences in harassment experiences or perception. We focus on groping

⁹Age, education, and occupation are correlated, so in Table A2 we regress experienced harassment on the demographic characteristics simultaneously. We see similar gaps by education, age, and occupation as in the raw data. We also estimate the prevalence gap between Delhi and Bengaluru conditional on demographics and find it is very similar to the raw gap; compositional differences do not drive the between-city gap. The gap is also stable across venue types: Delhi rates are roughly 2.2 times Bengaluru rates whether women were surveyed at metro stations, bus stops, or markets (Table A1).

since it is arguably one of the more objective (and severe) forms of harassment. In Delhi, it shows a similar pattern by education as overall harassment, suggesting that the education gradient in reported harassment reflects genuine differences in exposure rather than differences in what women perceive as harassment. A limitation is that the analysis does not rule out differences across demographic groups in willingness to report incidents in the survey.

3.3 Where and when are women harassed?

The most common location to experience gender-based harassment in both cities is on the street, while walking or standing (Figure A4). Transport is the next most common location, including at a bus stop or station or while on a form of transit (bus/auto/taxi/metro). Harassment in markets and shops is high in Delhi (40% of women’s most recent harassment incidents took place while shopping) while lower in Bengaluru (10%).

Most harassment takes place during the day. Across both cities, 76-80% of incidents take place between 5 am and 8 pm, with little difference between severe and less severe forms of harassment (Figure A5). While women who travel at night face more harassment than women who do not in both Delhi and Bengaluru (Figure A6), the difference is relatively modest. Even women who have not traveled at night in the last two weeks report high rates of harassment (57% in Delhi and 23% in Bengaluru). This reinforces the finding that most harassment takes place during the day, and that limiting nighttime mobility might not substantially reduce the chances of being harassed.

Most women are alone when they are harassed: 71-100% in Delhi and 67-89% in Bengaluru reported being unaccompanied when they were last harassed, across different harassment categories (Figure A7). Even so, women were rarely harassed without witnesses: in Bengaluru, where we asked about bystanders during the most recent incident, at least one was present in 90-98% of incidents of staring, gestures, catcalling, groping, and stalking (Figure A8). Only flashing is more likely to occur when there is no one else around.

In short, harassment is not just associated with dark and lonely public spaces; it occurs in broad daylight and in plain view.

3.4 Effect of screener questions on measured prevalence

Among all potential survey respondents, 10% were randomized to receive an alternative “screener-question version” of the survey.¹⁰ We include these respondents only in this subsection, to analyze the effects of questionnaire design on measured prevalence.

The alternative questionnaire used screener questions before asking about specific forms of gender-based harassment. Respondents were first asked whether they had experienced “non-physical forms of sexual harassment,” with examples listed (e.g., catcalls, sexual staring, lewd gestures, stalking). Only if they answered yes were they asked about specific subtypes within that category. A parallel screener question was then asked for “physical forms of sexual harassment” (e.g., groping, flashing, sexual assault). The main questionnaire, as discussed in section 2.1, had no such screener questions and asked all respondents about each specific subtype of harassment.

The two versions also differed in framing. The screener-question version explicitly labeled the behaviors as “sexual harassment.” The main version instead introduced the section neutrally as about “experiences in public spaces” before asking the respondent about specific behaviors. Thus, the alternative-questionnaire treatment is a bundle: screener questions plus labeling.

We hypothesized that the alternative version would yield a lower and likely less accurate prevalence estimate. Reporting an incident requires that the respondent recalls it, classifies it in the category she is being asked about, and chooses to disclose it; the alternative questionnaire raises the bar at each step. The screener questions about broad categories of behavior make it less likely that a woman recalls the incident and recognizes it as fitting the category. The label of “sexual harassment” might similarly make her less likely to place her experience in the category, and it might inhibit disclosure due to stigma.

Figure 2, Panel (a), shows that in both Delhi and Bengaluru, the main questionnaire yields significantly higher prevalence rates than the screener-question version. The ratio of main-version to screener-version prevalence is 1.26 in Delhi and 2.02 in Bengaluru.

The screener version understates both severe and less severe forms in both cities

¹⁰In each city, the experiment ended the day the 200th alternative questionnaire was fielded. Additional main-version respondents were surveyed on subsequent days, but we exclude them here; this subsection analyzes only randomized respondents. Appendix Table B2 demonstrates sample balance across the arms.

(Figure 2, Panel (b)). Respondents are unlikely to exclude groping or assault from a category labeled sexual harassment, so categorization cannot by itself explain the version effect. That leaves recall and disclosure. The pattern across cities, shown next, points to recall, and hence to the screener questions as the primary driver of the version effect.

The Delhi–Bengaluru gap in version effects is driven by less severe harassment.¹¹ Severe forms are plausibly more memorable, with underreporting reflecting mainly reluctance to disclose. One potential explanation for why screener questions depress reporting of less severe, less memorable harassment more in Bengaluru than in Delhi is the *incidence* rate, or the “intensive” margin of harassment. In Delhi, those who experienced less severe harassment in the past year likely experienced it more often and more recently. Indeed, among women in Delhi who experienced less severe harassment in the past year, 81% experienced it in the past month, compared to 69% in Bengaluru. In addition, while we did not collect the number of incidents in the past year, we can examine how many specific types the woman experienced. Conditional on having experienced a less severe type of harassment in the past year, women in Delhi experienced 1.91 distinct types, on average, compared to 1.47 in Bengaluru.¹² A larger version effect in Bengaluru than in Delhi for less severe harassment is what recall-based underreporting predicts. In contrast, there is no obvious *a priori* basis for expecting a labeling effect operating through stigma (Weiss, 2010; Carson et al., 2020) to vary across cities in this way.

The same logic generalizes beyond these two cities. Under most plausible arrival processes for violence, prevalence and incidents per victim are positively correlated. Victims in low-prevalence settings will therefore have experienced fewer incidents, and experienced them longer ago, making those incidents less salient. Thus, measured prevalence is likely to be more downward biased, and more sensitive to questionnaire design, in low-prevalence settings. That measured victimization is understated in surveys and depends on the use of screener questions is established (Cantor and Lynch, 2000), as is the finding that incidents per victim tends to rise with the overall rate of crime (Trick-

¹¹The difference in ratios across cities is statistically significant for both any harassment ($p = 0.012$) and less severe forms ($p = 0.013$), and statistically insignificant for severe forms ($p = 0.69$). The difference in ratios across cities is significantly larger for less severe forms than for severe forms at the 10% level ($p = 0.084$). The statistical tests are based on a Poisson model with indicators for questionnaire version, city, severity level, and their interactions.

¹²These calculations use respondents surveyed with the main questionnaire, the sample we believe provides more accurate responses.

ett et al., 1992). Our contribution is to connect these two findings and to show that the resulting prediction holds: the version effect is substantially larger in Bengaluru, the lower-prevalence city. The implications are that measured differences in prevalence across settings might overstate true differences, and that questionnaire design cannot be treated as neutral when prevalence is compared across populations.

3.5 How the risk of harassment affects women

The high prevalence of gender-based harassment documented above has consequences beyond its direct victims. In this section, we examine how the risk of harassment shapes women’s well-being, their mobility, and their economic activities.

3.5.1 Self-reported anxiety about harassment

For each type of harassment, the survey asked women, “How much anxiety does the possibility of [type] cause you when you travel?”, with the answer choices being extremely anxious, anxious, a little bit anxious, or not anxious at all. The questions were fielded to random subsamples of respondents, so the estimates in this subsection rest on smaller samples than the prevalence results above.¹³

The anxiety women experience differs between the cities in line with the gap in prevalence rates. Almost all women in Delhi report feeling some level of anxiety due to the prevalence of harassment, while three-fourths of women in Bengaluru do (see Figure A3, which shows the breakdown by incident type and level of anxiety). Table 2 focuses on the share of women who express extreme anxiety, which ranges from 33% to 52% in Delhi and 16% to 25% in Bengaluru. For example, 40% of women in Delhi and 17% of women in Bengaluru report feeling extremely anxious about catcalling, one of the most common forms of harassment. Sexual assault is much less prevalent (2% in Delhi and less than 0.3% in Bengaluru) but weighs heavily on many women. In Delhi, 46% of women report feeling extremely anxious about the potential for sexual assault, while in Bengaluru, the rate is 25%.

¹³Each of the seven anxiety questions was administered to a random subsample of respondents, drawn independently across harassment types and irrespective of whether the respondent had experienced that type. The sampling rate was 10% per type in Bengaluru and in Delhi from November 30, 2024. Earlier Delhi surveys used higher type-specific rates (25-100%), so the Delhi samples are larger for stalking, flashing, and sexual assault.

Most striking is flashing, which Indian law treats as a bailable offense and which we accordingly group with the less severe forms. It nonetheless generates as much anxiety for women in both cities as sexual assault (52% of women in Delhi and 25% of women in Bengaluru). This pattern accords with the shadow of sexual assault hypothesis (Ferraro, 1996), under which women’s fear of lesser offenses is elevated by the possibility that an encounter might escalate. A man who displays his genitals to a woman in public has shown a willingness to disregard the norms and legal sanctions that ordinarily deter assault, and women might read the act as a signal that assault may follow.

Table 2 also reports how anxiety differs between women who did versus did not report experiencing harassment in the previous year. In Delhi, the differences are small. For staring, lewd gestures, and sexual assault, the gap in extreme anxiety between the two groups is close to 0, and for no category is the gap larger than 11 percentage points. Given the high prevalence of harassment in Delhi, one possibility is that women who were not harassed themselves still know many women who were, leading to high anxiety regardless of personal victimization.

In Bengaluru, in contrast, women’s anxiety varies based on their recent victimization, not for the five most common types of harassment, but for the two least common ones, flashing and sexual assault. 46% of those in Bengaluru who faced any form of harassment in the past year report feeling extremely anxious about flashing, compared to 15% among women who did not face harassment in the past year ($p < 0.001$). Similarly, 40% of those who faced harassment report feeling extremely anxious about sexual assault compared to 18% among those who were not harassed ($p = 0.001$).¹⁴ Thus, past experience does not seem to simply make victims more anxious overall, but specifically about flashing and sexual assault. The patterns are not driven by direct experience with flashing or sexual assault. Among Bengaluru respondents who had been harassed in the past year and were asked about anxiety over flashing or sexual assault, only 10% had themselves experienced flashing and 4% sexual assault; most had faced unwanted staring, groping, or catcalls. While there may be many explanations for these patterns, one possibility is that direct experience of common forms of harassment makes the possibility of more egregious harassment more salient, in line with the shadow of sexual assault hypothesis.

¹⁴The gap in extreme anxiety between recent victims and non-victims is statistically significantly larger in Bengaluru than in Delhi for both flashing and sexual assault ($p = 0.003$).

3.5.2 Self-reported influence of harassment on mobility

Women in Delhi and Bengaluru both report that the fear of gender-based harassment in public spaces affects their decision about whether to work and where to work. Figure 3 shows that, among non-students, 71% of women in Delhi and 68% of women in Bengaluru said that harassment was either very important or somewhat important in their decision about whether to work. Among women who work or have previously worked outside the home, 84-87% (Bengaluru vs Delhi) reported the same about where to work. These rates are strikingly similar across both cities, despite the large differences in reported prevalence rates.

The prospect of being harassed also constrains women’s daily activities (see Figure A9). In Delhi, 71% of women report that the fear of harassment limits their social activities, and 54% say it limits their ability to carry out chores and self-care. For Bengaluru, the corresponding estimates are much lower, 21% and 17%, respectively. Thus, unlike work-related decisions, decisions about social activities, chores, and self-care seem to track prevalence.¹⁵ Our data, unfortunately, do not allow us to explain this puzzle. It is possible that, compared to commuting to work, travel for social activities is less often solo and travel for chores is viewed as less discretionary, by the women themselves or their families.

4 Conclusion

Using a survey of more than 4,000 women in Delhi and Bengaluru, we document that gender-based harassment in public is prevalent and occurs predominantly in daylight and in crowded, everyday settings such as streets, transit, and markets. Harassment is therefore difficult for women to avoid in the course of routine activities such as errands, work, and socializing. Prevalence differs sharply across the two cities: 65% of women in Delhi and 29% in Bengaluru report harassment in the past year. Within each city, prevalence is highest among younger and more educated women — the very women whose participation in the labor force could fuel a growing economy.

¹⁵The question about whether to work was asked only to non-students, whereas the questions about social activities and chores were asked of all respondents. We find very similar patterns for the social activities and chores measures excluding students.

Women’s anxiety about potential harassment tracks the more-than-twofold gap in prevalence across cities, yet women in both cities report similarly large effects of that fear on whether and where they work. The near-invariance of these reported effects suggests that the welfare costs of harassment are shaped as much by the ambient threat as by realized incidents. Prevalence measures experienced harassment; it does not count the routes not taken, the jobs not applied for, or the hours not worked. Our findings suggest that much of the cost of harassment lies there.

References

- ActionAid (2016). *Women and the City III: A Summary of Baseline Data on Women's Experience of Violence in Seven Countries*. Tech. rep. ActionAid International.
- Aguilar, Arturo, Emilio Gutiérrez, and Paula Soto Villagrán (2021). “Benefits and Unintended Consequences of Gender Segregation in Public Transportation: Evidence from Mexico City’s Subway System”. *Economic Development and Cultural Change* 69.4, pp. 1379–1410.
- Amaral, Sofia, Girija Borker, Nathan Fiala, Anjani Kumar, Nishith Prakash, and Maria Micaela Sviatschi (2025). “Sexual Harassment in Public Spaces and Police Patrols: Experimental Evidence from Urban India”. *Quarterly Journal of Economics*.
- Baxi, Pratiksha (2001). “Sexual Harassment”. *Seminar* 505.
- Borker, Girija (forthcoming). “Safety First: Perceived Risk of Street Harassment and Educational Choices of Women”. *American Economic Review*.
- Cantor, David and James P Lynch (2000). “Self-Report Surveys as Measures of Crime and Criminal Victimization”. *Criminal Justice* 4.2000, pp. 85–138.
- Carson, Kaitlin Walsh, Sara Babad, Elissa J. Brown, Claudia Chloe Brumbaugh, Betzabe K. Castillo, and Valentina Nikulina (2020). “Why Women Are Not Talking about It: Reasons for Nondisclosure of Sexual Victimization and Associated Symptoms of Posttraumatic Stress Disorder and Depression”. *Violence against Women* 26.3–4, pp. 271–295.
- Dhillon, Megha and Suparna Bakaya (2014). “Street Harassment: A Qualitative Study of the Experiences of Young Women in Delhi”. *SAGE Open* 4.3, pp. 1–11.
- European Union Agency for Fundamental Rights (2014). *Violence against Women: An EU-Wide Survey—Main Results Report*. Tech. rep. Vienna: FRA.
- Ferraro, Kenneth F (1996). “Women’s Fear of Victimization: Shadow of Sexual Assault?” *Social Forces* 75.2, pp. 667–690.
- Fisher, Bonnie S, Francis T Cullen, and Michael G Turner (2000). *The Sexual Victimization of College Women*. Tech. rep. NCJ 182369. Washington, DC: U.S. Department of Justice, National Institute of Justice.

- Fitzgerald, Louise F, Michele J Gelfand, and Fritz Drasgow (1995). “Measuring Sexual Harassment: Theoretical and Psychometric Advances”. *Basic and Applied Social Psychology* 17.4, pp. 425–445.
- Fletcher, Erin, Rohini Pande, and Charity Troyer Moore (2019). “Women and Work in India: Descriptive Evidence and a Review of Potential Policies”. *India Policy Forum*. Vol. 15. 1. National Council of Applied Economic Research, pp. 149–216.
- Folke, Olle and Johanna Rickne (2022). “Sexual Harassment and Gender Inequality in the Labor Market”. *Quarterly Journal of Economics* 137.4, pp. 2163–2212.
- García-Moreno, Claudia, Henrica AFM Jansen, Mary Ellsberg, Lori Heise, and Charlotte H Watts (2006). “Prevalence of Intimate Partner Violence: Findings from the WHO Multi-country Study on Women’s Health and Domestic Violence”. *The Lancet* 368.9543, pp. 1260–1269.
- Garlick, Robert, Erica Field, and Kate Vyborny (2025). *Women’s Mobility and Labor Supply: Experimental Evidence from Pakistan*. Working Paper. Duke University.
- Jayachandran, Seema (2021). “Social Norms as a Barrier to Women’s Employment in Developing Countries”. *IMF Economic Review* 69.3, pp. 576–595.
- Keel, Chloe, Rebecca Stewart, and Jacques Mellberg (2024). “Operationalizing Street Harassment Using Survey Instruments: A Systematic Review of Measuring Harassment in Public Spaces Using Surveys”. *Trauma, Violence, & Abuse* 25.4, pp. 2609–2621.
- Klasen, Stephan and Janneke Pieters (2015). “What Explains the Stagnation of Female Labor Force Participation in Urban India?” *World Bank Economic Review* 29.3, pp. 449–478.
- Kondylis, Florence, Arianna Legovini, Kate Vyborny, Astrid Zwager, and Luiza Cardoso de Andrade (2025). “Demand for “Safe Spaces”: Avoiding Harassment and Complying with Norms”. *Journal of Development Economics* 174, p. 103392.
- Magley, Vicki J, Charles L Hulin, Louise F Fitzgerald, and Matthew DeNardo (1999). “Outcomes of Self-Labeling Sexual Harassment”. *Journal of Applied Psychology* 84.3, pp. 390–402.
- Muhib, Farzana B, Lillian S Lin, Ann Stueve, Robin L Miller, Wesley L Ford, Wayne D Johnson, and Philip J Smith (2001). “A Venue-Based Method for Sampling Hard-to-Reach Populations”. *Public Health Reports* 116.Suppl 1, pp. 216–222.

- Rollison, Julia, Joachim O. Hero, Katie Feistel, Armenda Bialas, Owen Hall, Rosemary Li, Sarah Weilant, Jody Larkin, Coreen Farris, and Kristie L. Gore (2023). *Psychological Harms and Treatment of Sexual Assault and Sexual Harassment in Adults: Systematic and Scoping Reviews to Inform Improved Care for Military Populations*. Tech. rep. RR-A668-1. Santa Monica, CA: RAND Corporation.
- Siddique, Zahra (2022). “Media-Reported Violence and Female Labor Supply”. *Economic Development and Cultural Change* 70.4, pp. 1337–1365.
- Talboys, Sharon L., Manmeet Kaur, James VanDerslice, Lisa H. Gren, Haimanti Bhattacharya, and Stephen C. Alder (2017). “What Is Eve Teasing? A Mixed Methods Study of Sexual Harassment of Young Women in the Rural Indian Context”. *SAGE Open* 7.1.
- Trickett, Alan, Denise R Osborn, Julie Seymour, and Ken Pease (1992). “What Is Different about High Crime Areas?” *The British Journal of Criminology* 32.1, pp. 81–89.
- UN Women and International Center for Research on Women (2013). *Unsafe: An Epidemic of Sexual Violence in Delhi’s Public Spaces. Baseline Findings from the Safe Cities Delhi Program*. Tech. rep. New Delhi: International Center for Research on Women.
- Vera-Gray, Fiona (2016). *Men’s Intrusion, Women’s Embodiment: A Critical Analysis of Street Harassment*. Routledge.
- Weiss, Karen G. (2010). “Too Ashamed to Report: Deconstructing the Shame of Sexual Victimization”. *Feminist Criminology* 5.3, pp. 286–310.
- Wilson, Lindsay C and Kathryn E Miller (2016). “Meta-analysis of the Prevalence of Unacknowledged Rape”. *Trauma, Violence, & Abuse* 17.2, pp. 149–159.
- Zietz, Samantha and Manasi Das (2017). “‘Nobody Teases Good Girls’: A Qualitative Study on Perceptions of Sexual Harassment among Young Men in Mumbai”. *Global Public Health* 12.9, pp. 1136–1151.

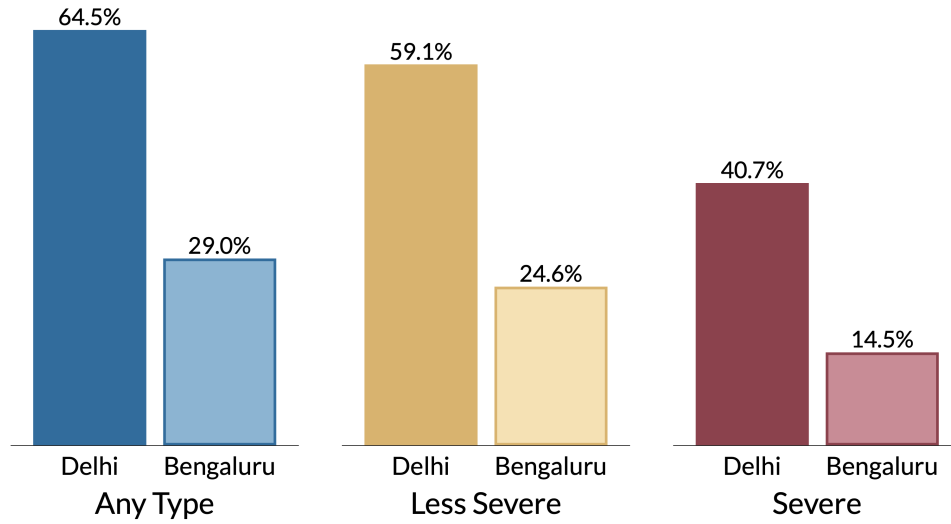
Tables and figures

Table 1: Sample composition and prevalence of harassment in the past year, by subgroup

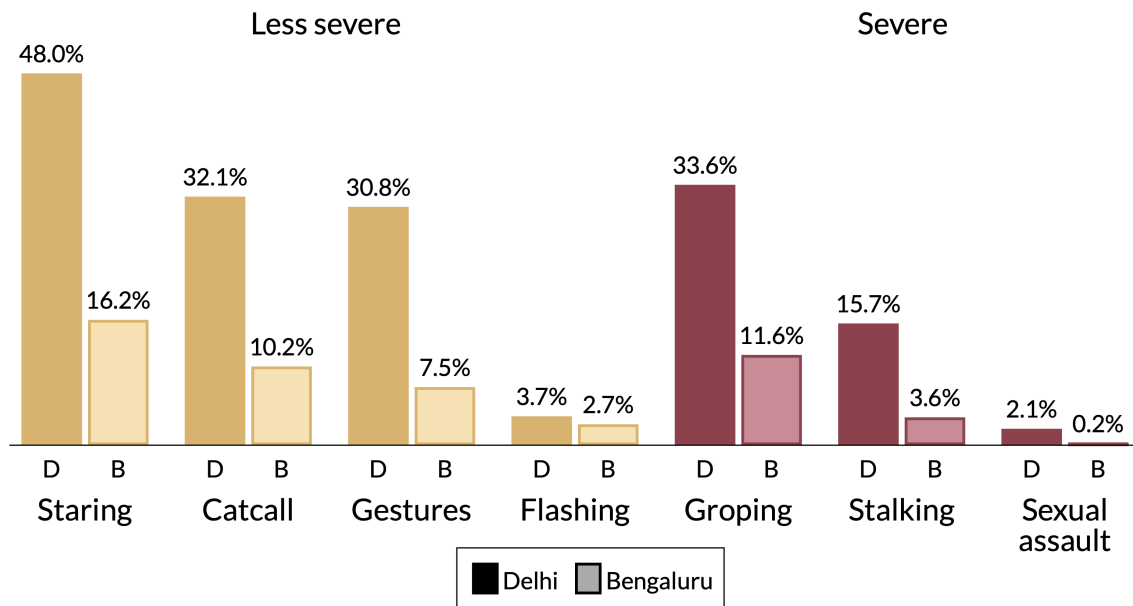
	Sample composition (% of respondents)		Prevalence of harassment in past year (%)	
	Delhi (1)	Bengaluru (2)	Delhi (3)	Bengaluru (4)
Age				
19	8.0	6.5	81.1	42.6
20-25	40.9	34.1	72.5	32.3
26-30	22.6	25.6	62.3	29.2
31-35	16.9	17.8	51.9	25.0
36-40	11.6	16.0	47.1	20.6
Education				
Less than 12th standard	24.2	21.0	41.3	22.8
12th standard	28.7	33.5	71.4	27.6
Graduate	47.0	45.5	72.1	33.0
Work status				
Works outside home	47.3	57.5	70.4	28.0
Other non-student women	39.2	26.2	50.6	27.1
Students	13.4	16.3	84.4	35.6
Caste				
General	62.6	43.6	65.7	30.0
OBC	15.0	35.1	66.0	30.4
Scheduled Caste	20.8	15.9	64.3	23.7
Scheduled Tribe	1.6	5.3	62.5	25.9
Religion				
Hindu	86.0	82.7	64.5	29.0
Muslim	10.4	9.5	63.8	29.3
Christian	1.1	7.4	63.6	28.4
Other	2.4	0.4	66.0	50.0

Notes: The overall main-questionnaire sample contains 2,048 respondents in Delhi and 2,089 in Bengaluru, aged 19–40 and surveyed at bus stops, metro stations, and markets. The “Sample-composition” columns report percentages among respondents with non-missing values of the relevant characteristic. “Prevalence” columns report the share (%) of women in each group reporting any gender-based harassment in the last year.

Figure 1: Percent of women harassed last year



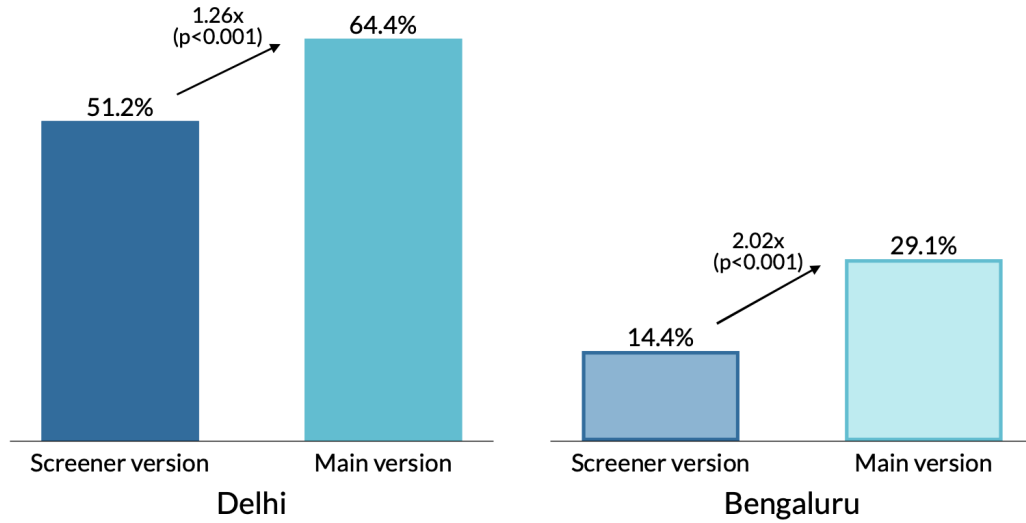
(a) Overall and by severity



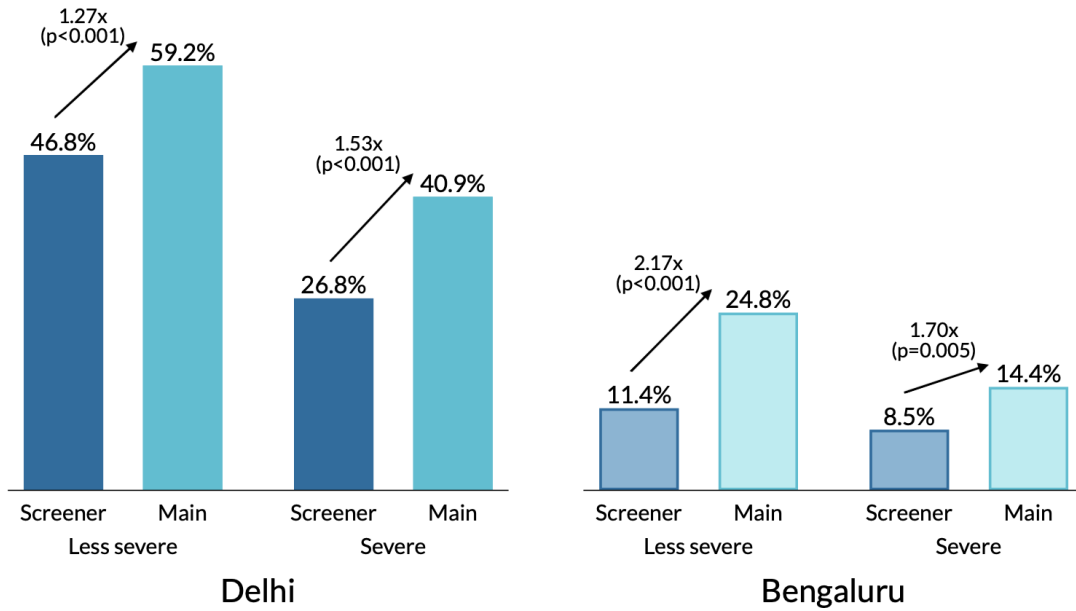
(b) By specific type of harassment

Notes: $N = 2,048$ (Delhi); 2,089 (Bengaluru). Women aged 19-40 surveyed at bus stops, metro stations, and markets. “Severe” includes groping, stalking, and sexual assault. “Less severe” includes staring, catcalls, lewd gestures, and flashing.

Figure 2: Prevalence based on main questionnaire versus version with screener questions



(a) Overall



(b) By severity

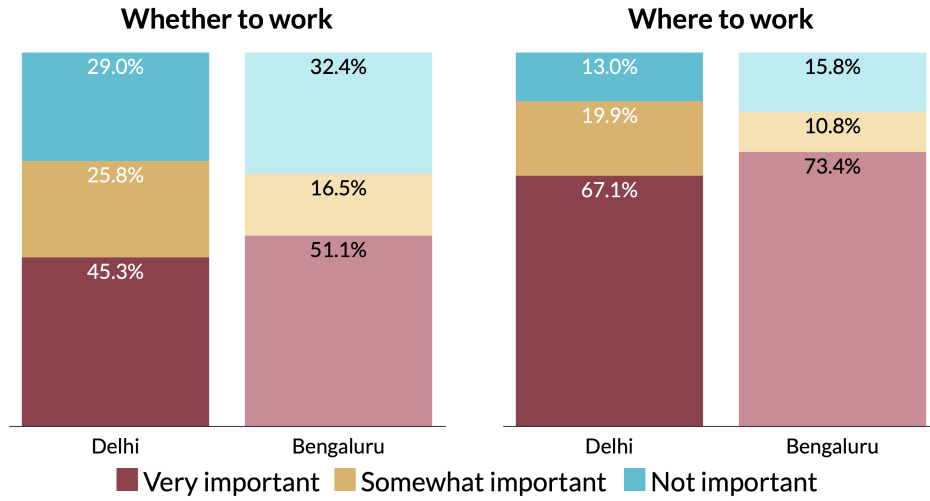
Notes: Screener version $N = 201$ (Delhi); 201 (Bengaluru). Main version $N = 1,900$ (Delhi); 1,823 (Bengaluru). Sample consists only of randomized respondents.

Table 2: Percent extremely anxious about each type of harassment, by city

GBH Type	All		GBH = 1		GBH = 0		Diff.	p-value
	%	N	%	N	%	N		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel (a): Delhi								
Staring	33.2	292	33.5	203	32.6	89	0.9	0.879
Catcall	40.1	476	41.3	332	37.5	144	3.8	0.442
Gestures	37.6	540	37.1	385	38.7	155	-1.6	0.734
Flashing	52.3	839	54.0	600	48.1	239	5.9	0.124
Groping	44.3	526	47.4	371	36.8	155	10.7	0.025
Stalking	45.0	842	47.7	598	38.5	244	9.1	0.016
Sexual assault	46.0	841	45.7	593	46.8	248	-1.1	0.776
Panel (b): Bengaluru								
Staring	15.8	177	15.4	52	16.0	125	-0.6	0.919
Catcall	16.9	207	23.6	55	14.5	152	9.2	0.121
Gestures	16.3	221	21.2	66	14.2	155	7.0	0.198
Flashing	24.5	192	46.4	56	15.4	136	31.0	0.000
Groping	17.0	182	24.5	49	14.3	133	10.2	0.105
Stalking	17.4	201	20.8	48	16.3	153	4.5	0.476
Sexual assault	24.9	213	39.7	68	17.9	145	21.8	0.001

Notes: Percent reporting being extremely anxious about the possibility of experiencing each type of harassment while traveling. GBH = 1 restricts to respondents who experienced any gender-based harassment in the last year; GBH = 0 restricts to those who did not. Each type of harassment was asked of a randomly selected subsample of respondents. Respondents were asked: “How much anxiety does the possibility of [type of harassment] cause you when you travel?” The full distribution across all four anxiety categories for the “All” column is shown in Figure A3.

Figure 3: Relevance of harassment in employment decisions



Notes: “Whether to work” was asked of all non-student respondents ($N = 1,763$ Delhi; 1,741 Bengaluru). Respondents were asked: “Think back to your decision on whether to work or not to work. How important was the fear of sexual harassment in public spaces in influencing this decision?” The question “Where to work” was asked of respondents who currently work or have previously worked outside the home, including students ($N = 1,085$ Delhi; 1,280 Bengaluru). Respondents were asked: “When women decide where they are going to work, they have a choice between working in different places. For eg: Your surveyor works at J-PAL South Asia. Similarly, you also have a place where you work. Think about the time when you made a decision regarding the place where you will work. How important a reason is sexual harassment and safety in public spaces (e.g., for your commute) for your decision on where to work?”

A Additional figures and tables

Figure A1: Survey participation flowchart: Delhi

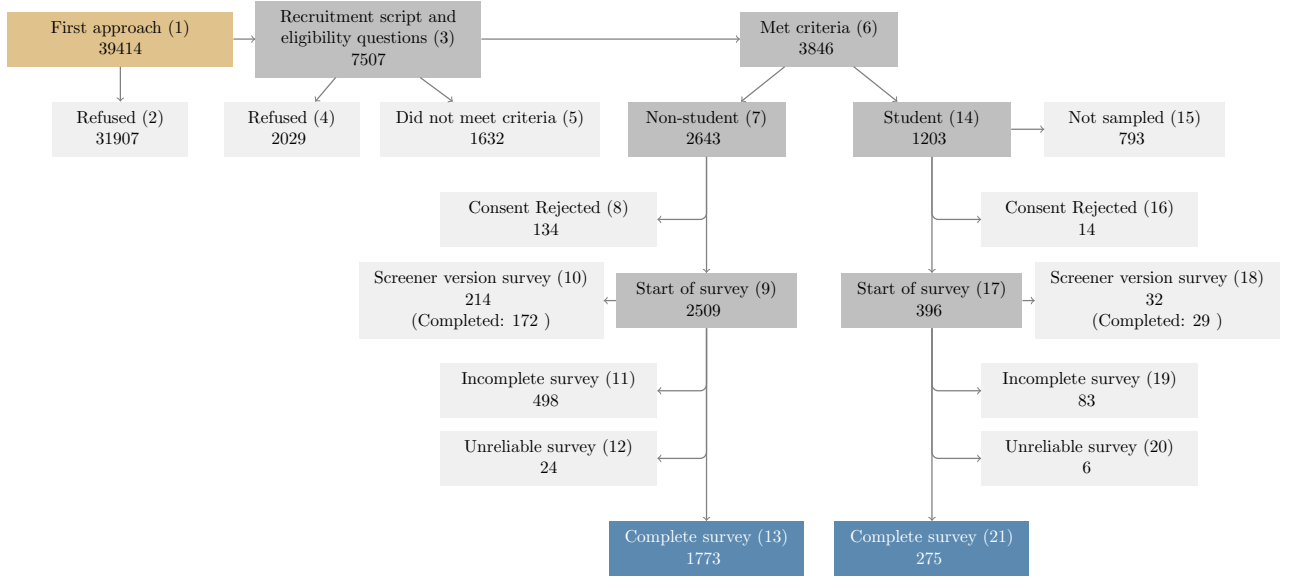


Figure A2: Survey participation flowchart: Bengaluru

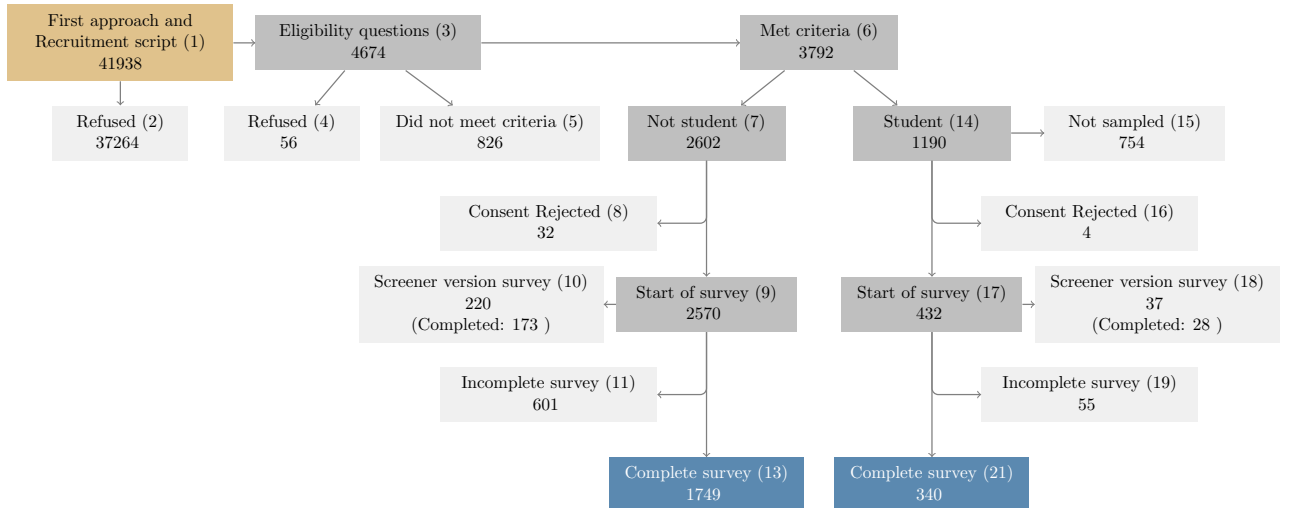


Table A1: Prevalence of harassment across subgroups

	Delhi (1)	Bengaluru (2)
Panel (a): Recall period		
Ever	72.4	34.9
Panel (b): Type of harassment		
Staring	48.0	16.2
Catcall	32.1	10.2
Gestures	30.8	7.5
Flashing	3.7	2.7
Groping	33.6	11.6
Stalking	15.7	3.6
Sexual assault	2.1	0.2
Panel (c): Groping, by education		
Less than 12th standard	21.0	13.5
12th standard	37.5	10.9
Graduate	37.8	11.4
Panel (d): By location of survey		
<i>Bus stop</i>		
Any type	61.8	27.4
Less severe	56.4	23.4
Severe	40.0	13.0
<i>Metro station</i>		
Any type	77.8	35.2
Less severe	73.0	29.2
Severe	49.8	18.4
<i>Market</i>		
Any type	64.7	29.8
Less severe	59.2	25.6
Severe	38.6	15.8

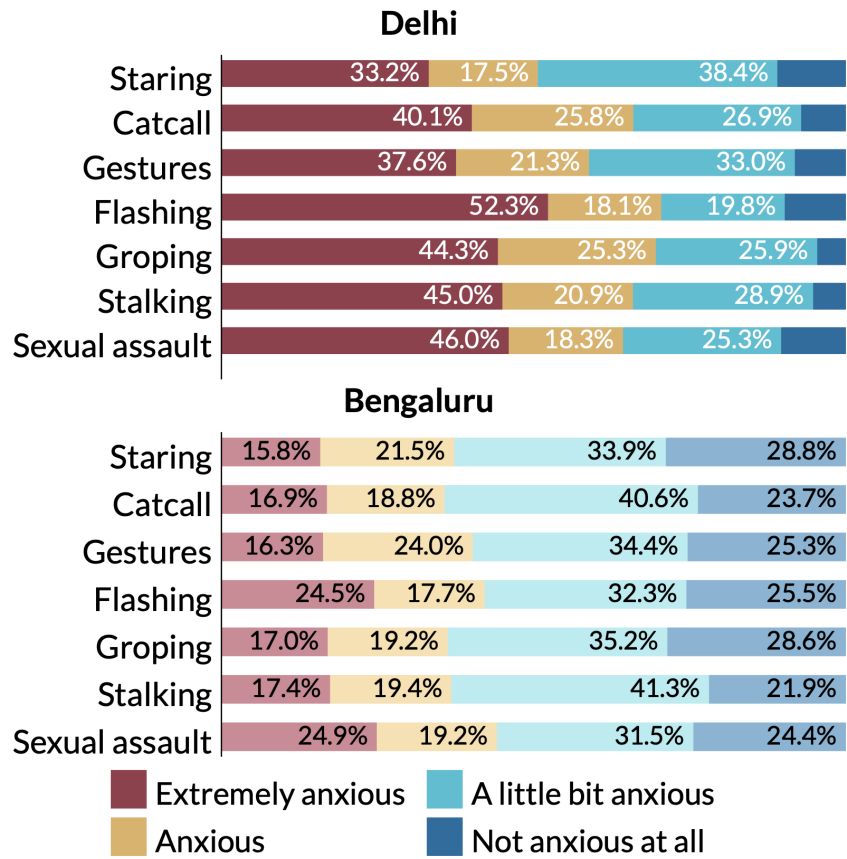
Notes: $N = 2,048$ (Delhi); 2,089 (Bengaluru). Cells report the share (%) of women reporting harassment. Panel (b) categories are not mutually exclusive. Panel (c): groping includes unwelcome touching or groping; graduate refers to bachelor's degree or above. Panel (d): women aged 19-40 surveyed at bus stops, metro stations, and markets; "severe" includes groping, stalking, and sexual assault, "less severe" includes staring, catcalls, lewd gestures, and flashing, and categories are not mutually exclusive.

Table A2: Correlates of harassment in the last year, by city

	Delhi		Bengaluru		Pooled	
	(1)	(2)	(3)	(4)	(5)	(6)
Age 19	0.268*** (0.0500)	0.179*** (0.0525)	0.213*** (0.0520)	0.202*** (0.0603)	0.229*** (0.0354)	0.178*** (0.0388)
Age 20-25	0.179*** (0.0382)	0.146*** (0.0384)	0.0901*** (0.0320)	0.0863** (0.0339)	0.123*** (0.0247)	0.101*** (0.0254)
Age 26-30	0.0901** (0.0404)	0.0869** (0.0400)	0.0567* (0.0324)	0.0590* (0.0325)	0.0585** (0.0256)	0.0546** (0.0256)
Age 31-35	0.0337 (0.0424)	0.0372 (0.0421)	0.0246 (0.0326)	0.0259 (0.0326)	0.0171 (0.0264)	0.0161 (0.0264)
Less than 12th standard	-0.259*** (0.0297)	-0.222*** (0.0301)	-0.0551* (0.0290)	-0.0566* (0.0290)	-0.162*** (0.0211)	-0.146*** (0.0211)
12th standard	-0.0633** (0.0257)	-0.0483* (0.0254)	-0.0759*** (0.0236)	-0.0796*** (0.0241)	-0.0693*** (0.0174)	-0.0622*** (0.0175)
OBC	-0.00865 (0.0295)	-0.00501 (0.0289)	0.0150 (0.0231)	0.0146 (0.0233)	0.0161 (0.0181)	0.0161 (0.0181)
Scheduled Caste	0.0506** (0.0255)	0.0497* (0.0255)	-0.0384 (0.0288)	-0.0386 (0.0289)	0.0135 (0.0193)	0.0129 (0.0193)
Scheduled Tribe	0.0267 (0.0852)	0.0408 (0.0820)	-0.0153 (0.0454)	-0.0163 (0.0455)	0.00526 (0.0404)	0.0126 (0.0401)
Other non-student women		-0.147*** (0.0236)		0.0155 (0.0235)		-0.0787*** (0.0167)
Students		0.0560* (0.0293)		0.0218 (0.0378)		0.0284 (0.0238)
Delhi					0.357*** (0.0151)	0.371*** (0.0151)
Constant	0.600*** (0.0369)	0.657*** (0.0379)	0.265*** (0.0305)	0.260*** (0.0317)	0.263*** (0.0245)	0.285*** (0.0250)
Observations	1979	1977	2038	2036	4017	4013
R-squared	0.090	0.113	0.020	0.020	0.171	0.177
Adjusted R-squared	0.085	0.108	0.016	0.015	0.169	0.175

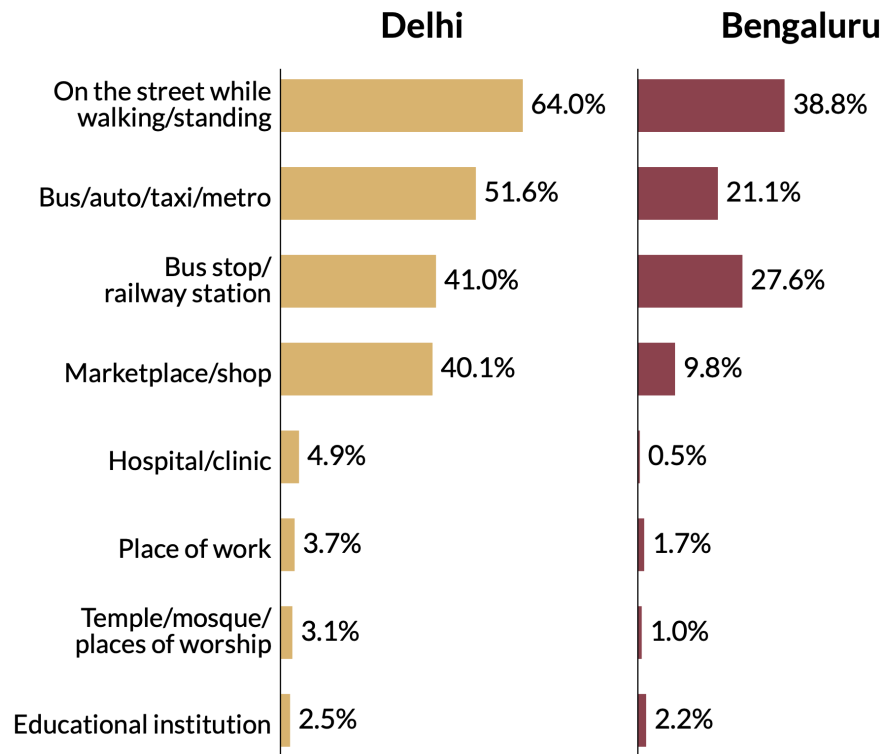
Notes: The dependent variable is an indicator for experiencing gender-based harassment in the past year. Columns 1, 3, and 5 include indicators for age, education and caste, and reference categories are age 36-40, graduate education, general (caste) category. Columns 2, 4, and 6 add indicators for student/work status and the reference category is working outside the home. We exclude religion as harassment differs little across major groups, and the religious composition of the two samples is similar. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure A3: Anxiety from the possibility of harassment



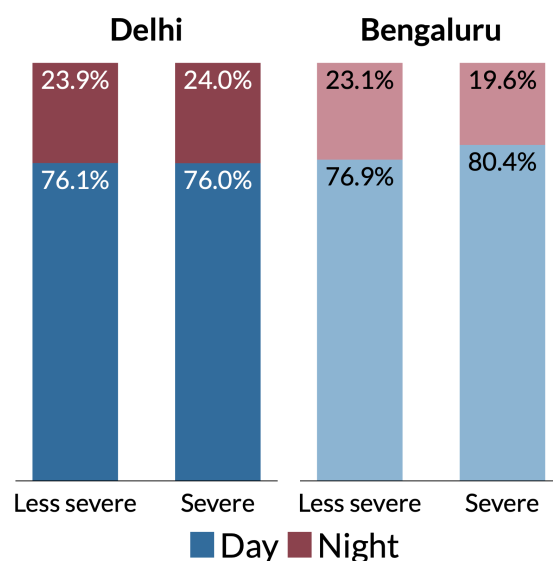
Notes: *N* by type in Delhi (Bengaluru): staring = 292 (177); catcall = 476 (207); gestures = 540 (221); flashing = 839 (192); groping = 526 (182); stalking = 842 (201); sexual assault = 841 (213). Each type of harassment was asked of a randomly selected subsample of respondents, regardless of whether they had experienced harassment. Respondents were asked: “How much anxiety does the possibility of [type of harassment] cause you when you travel?”

Figure A4: Places where women experience harassment



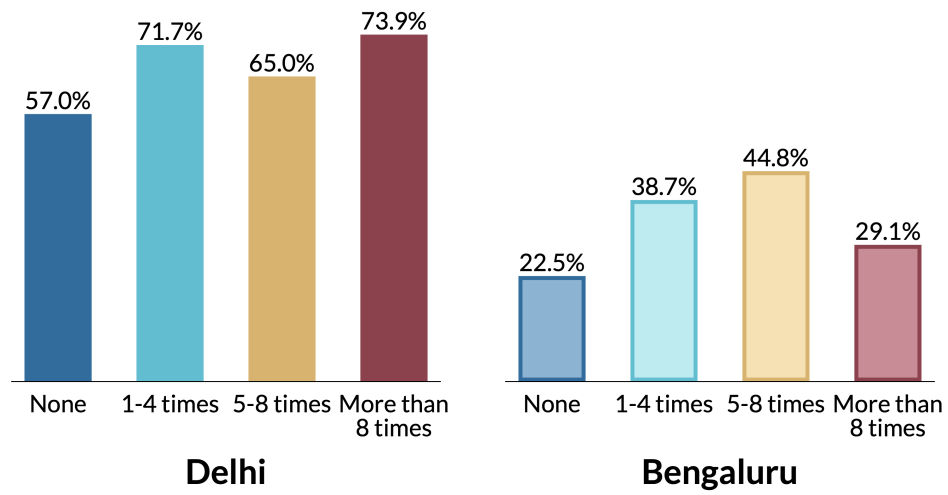
Notes: $N = 1,320$ (Delhi); 606 (Bengaluru). Sample restricted to women who reported experiencing gender-based harassment in the last year. Categories are not mutually exclusive.

Figure A5: Harassment during day vs. at night, by severity



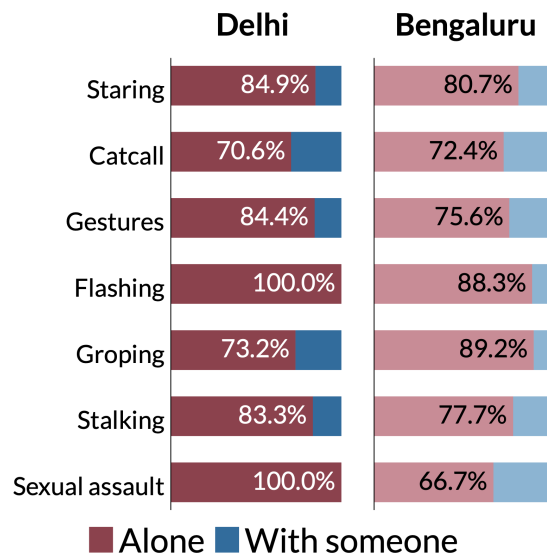
Notes: N by severity in Delhi (Bengaluru): less severe = 564 (359), severe = 488 (250). Sample restricted to women who experienced an incident of harassment at these places in the last year: for staring, gestures, cat calls, and groping, a randomly selected subsample of those who experienced that type (ranging from 25% to 60%, and identical across cities except for groping); for stalking, flashing, and sexual assault, all women who experienced it. “Day” is defined as 5 am to 8 pm. Figure shows the share of most recent incidents occurring during the day vs. at night, by severity category.

Figure A6: Harassment in last year by nighttime travel frequency



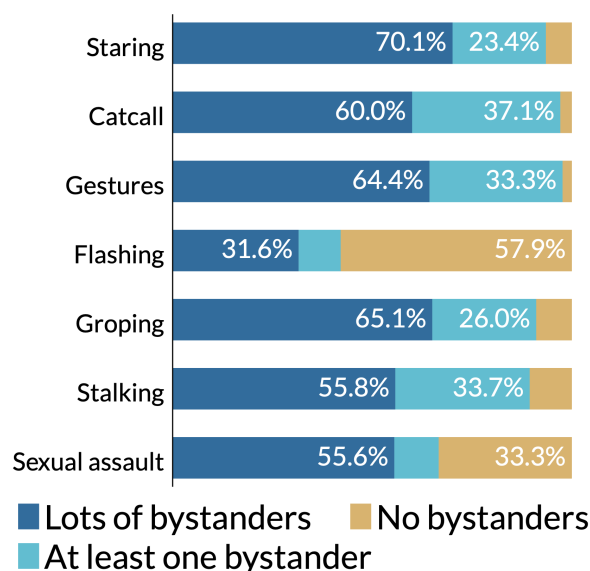
Notes: $N = 2,048$ (Delhi); 2,089 (Bengaluru). Nighttime travel frequency is the number of times in the past two weeks the respondent traveled alone or only with other women between 8 pm and 5 am.

Figure A7: Whether victim was alone when last harassed



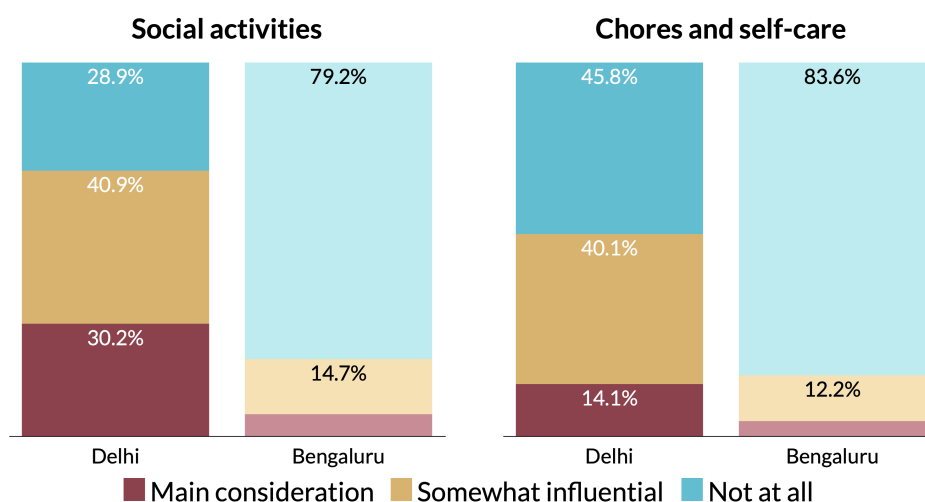
Notes: *N* by type in Delhi (Bengaluru): staring = 53 (88); catcall = 34 (105); gestures = 32 (90); flashing = 5 (77); groping = 41 (148); stalking = 18 (94); sexual assault = 2 (9). Questions were asked of a randomly selected subsample of respondents who reported experiencing gender-based harassment in the last year: in Delhi, all seven types of harassment were subsampled at the same rate (10%); in Bengaluru, only staring, gestures, cat calls, and groping were subsampled (ranging from 25% to 50%), while all women who experienced stalking, flashing, or sexual assault were asked. Figure shows whether the respondent was alone or with someone during the most recent incident of each type of harassment.

Figure A8: Crowdedness of area when last harassed, Bengaluru



Notes: Bengaluru only. *N* by type: staring = 77; catcall = 105; gestures = 87; flashing = 76; groping = 146; stalking = 95; sexual assault = 9. Sample restricted to women who reported experiencing gender-based harassment in the last year. Figure shows the level of crowding at the location of the most recent incident of each type of harassment.

Figure A9: Day-to-day limitations due to fear of harassment



Notes: *N* = 2,048 (Delhi); 2,089 (Bengaluru). Respondents were asked how much fear of gender-based harassment in public spaces limits their social activities and their ability to do chores and self-care (e.g., shopping, going to the doctor).

B Survey representativeness and shadow survey

Table B1: Demographic characteristics: Harassment survey, shadow survey, and NFHS-5

	GBH survey		Shadow survey		NFHS-5	
	Delhi	Bengaluru	Delhi	Bengaluru	Delhi	Bengaluru
	(1)	(2)	(3)	(4)	(5)	(6)
Age						
19	0.080	0.065			0.045	0.036
20-25 [†]	0.409	0.341	0.332	0.288	0.293	0.227
26-30	0.226	0.256	0.353	0.299	0.245	0.266
31-35	0.169	0.178	0.178	0.256	0.212	0.286
36-40	0.116	0.160	0.138	0.157	0.205	0.184
Caste						
General	0.626	0.436			0.511	0.116
OBC	0.150	0.351			0.194	0.558
Scheduled Caste	0.208	0.159			0.278	0.199
Scheduled Tribe	0.016	0.053			0.017	0.128
Education						
Less than 12th standard	0.242	0.210			0.206	0.135
12th standard	0.287	0.335			0.437	0.524
Graduate	0.470	0.455			0.357	0.342
Work/student status						
Works outside home	0.473	0.575				
Other non-student women	0.392	0.262				
Students	0.134	0.163	0.104	0.212		
Religion						
Hindu	0.860	0.827			0.845	0.846
Muslim	0.104	0.095			0.126	0.105
Christian	0.011	0.074			0.005	0.034
Other	0.024	0.004			0.024	0.015
Accompanied by						
Alone	0.749	0.718	0.586	0.662		
Not alone when recruited-only females	0.170	0.209	0.311	0.202		
Not alone when recruited-males	0.082	0.073	0.103	0.137		

Notes: The harassment survey is the primary survey collected for this study; women aged 19-40 surveyed at bus stops, metro stations, and markets. $N = 2,048$ (Delhi); 2,089 (Bengaluru). NFHS-5 refers to the National Family Health Survey 2019-21, restricted to women aged 19-40 in urban Delhi and Bengaluru.

[†] For the shadow survey, this age bin covers 18-25 years.

Table B2: Balance of demographic characteristics across questionnaire versions

	Delhi		Bengaluru	
	Screeners (1)	Main (2)	Screeners (3)	Main (4)
Age				
19	6.0	8.4	5.5	6.6
20-25	50.7	41.4	36.8	33.7
26-30	18.4	22.2	27.9	26.2
31-35	14.9	16.4	16.4	17.8
36-40	10.0	11.7	13.4	15.6
Education				
Less than 12th standard	25.4	23.8	29.0	21.0
12th standard	29.4	29.1	31.0	34.1
Graduate	45.3	47.1	40.0	44.9
Work status				
Works outside home	50.2	46.9	62.2	57.4
Other non-student women	35.3	38.6	23.9	25.6
Students	14.4	14.5	13.9	17.0
Caste				
General	63.3	62.5	38.5	44.3
OBC	14.8	15.1	36.9	35.3
Scheduled Caste	19.4	20.7	20.5	15.2
Scheduled Tribe	2.6	1.6	4.1	5.2
Religion				
Hindu	90.0	86.3	81.5	82.3
Muslim	8.5	10.4	11.0	9.8
Christian	0.5	0.9	7.0	7.5
Other	1.0	2.4	0.5	0.3
Joint F-test p-value (all demographics)	0.314		0.407	
Randomization-inference p-value	0.451		0.810	
Observations	201	1900	201	1823

Notes: Sample includes respondents to both the screener and main versions of the questionnaire, restricted to only the randomized respondents. The joint F-test and randomization-inference p-values test whether all demographics jointly predict version assignment.

C Prevalence of gender-based harassment in Jaipur

We also collected data on gender-based harassment in public spaces in a third city, Jaipur.¹⁶ Jaipur was the first city where we collected data, and the questionnaire we used was the screener-question version. As shown in section 3.4, the screener questions lead to systematically lower estimates of harassment prevalence than our main questionnaire, fielded in Delhi and Bengaluru, does.

The screener-question measures of harassment for Jaipur are directly comparable to the same measures for Delhi and Bengaluru. As seen in Figure C1, Panel (a), the prevalence rate for the past year in Jaipur is 38.5%, roughly midway between the rates in Bengaluru and Delhi. For both less severe and severe harassment, the prevalence in Jaipur lies between that of Bengaluru and Delhi.

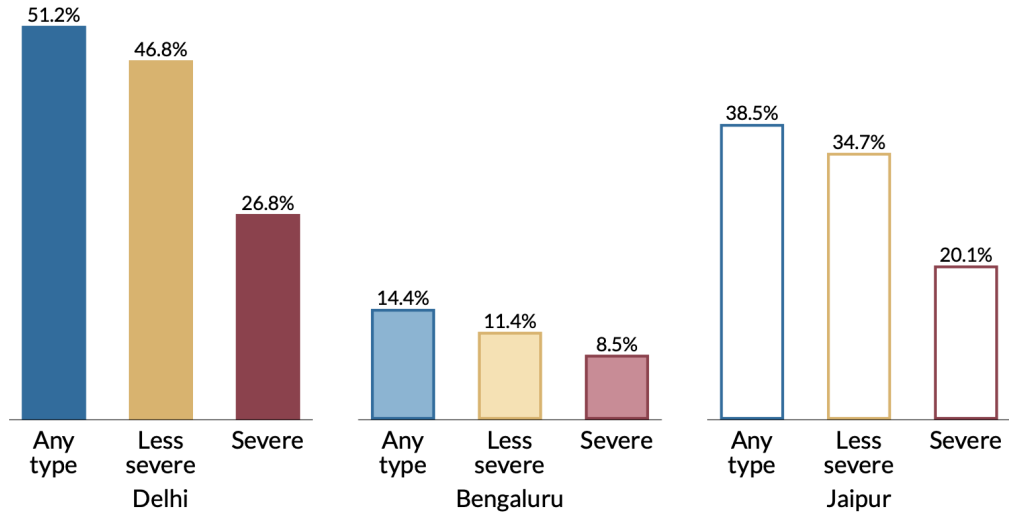
Because the screener-question version likely underestimates prevalence, we also report the extrapolated rate in Jaipur had we used the main questionnaire. To do so, we use the ratio of main version to screener-question version harassment rates observed in Delhi and Bengaluru (pooled) to construct re-scaled estimates for Jaipur. The assumption is that the under-reporting is proportional to the level of harassment in the population.

Figure C1, Panel (b), presents re-scaled harassment rates for Jaipur alongside the main estimates for Delhi and Bengaluru. Re-scaled, 55% of women surveyed in Jaipur experienced any harassment in public spaces within the last year, 51% experienced a less severe type, and 32% experienced a severe type.

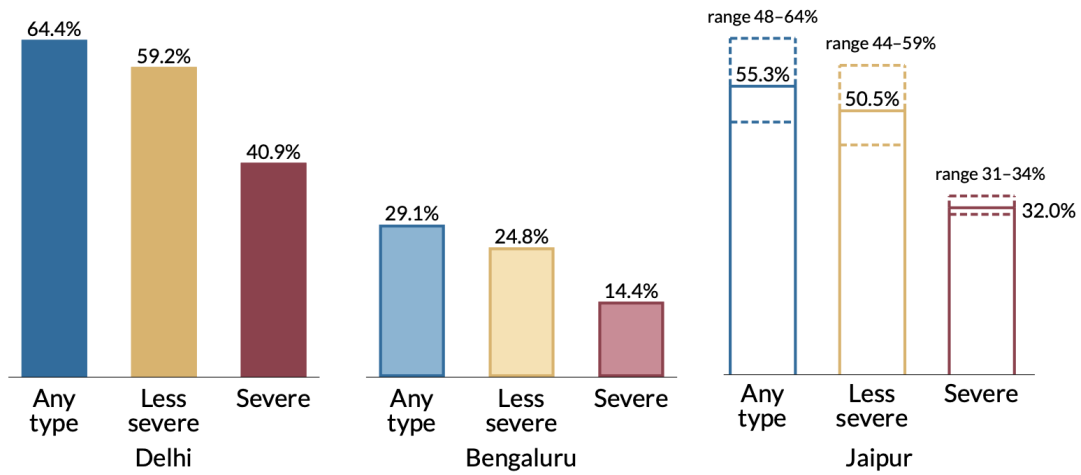
Alternatively, using the scale factor for just Delhi (Bengaluru) instead of the pooled value, the rates in Jaipur would be 48% (78%) for any harassment in the past year, 44% (75%) for less severe harassment, and 31% (34%) for severe harassment. When applying the Bengaluru scale factors, the rates for Jaipur sometimes exceed those for Delhi, contradicting the ordering in Panel (a). We therefore view the plausible prevalence ranges for Jaipur to be 48–64% for any harassment, 44–59% for less severe harassment, and 31–34% for severe harassment.

¹⁶The eligibility criteria in Jaipur were being 19 to 40 years old and a resident of Jaipur for at least one month. Unlike in Delhi and Bengaluru, students were not downsampled, but the Jaipur sample nonetheless does not overrepresent students or young people relative to the other two cities. Women aged 19–25 are 57% of the Jaipur sample versus 44% in the shadow survey (ratio of 1.29), compared to ratios of 1.47 in Delhi and 1.42 in Bengaluru (see Table B1).

Figure C1: Prevalence rates in Jaipur, compared to Delhi and Bengaluru



(a) Screener version



(b) Main version (Delhi and Bengaluru) and extrapolation (Jaipur)

Notes: Screener version $N = 201$ (Delhi); 201 (Bengaluru); 1,863 (Jaipur). Main version $N = 1,900$ (Delhi); 1,823 (Bengaluru). For Delhi and Bengaluru, sample consists only of randomized respondents. Jaipur statistics in Panel (b) are re-scaled using the main-to-screener version ratio observed in Delhi and Bengaluru.