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Evidence from Six Countries in the Americas

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Abstract

Crime levels are a perennial development problem in Latin America and a renewed concern in the United States. At the same time, trust in the police has been falling, and questions abound about citizens' willingness to support government efforts to fight crime. We conduct a survey experiment to elicit willingness to contribute toward reducing crime across five Latin American countries and the United States. We compare homicide, robbery, and theft estimates and find a higher willingness to contribute for more severe crimes and for higher crime reductions. In addition, we examine the role of information on the willingness to contribute by conducting two experiments. First, we show that exposing respondents to crime-related news increases their willingness to pay by 5 percent. Furthermore, while we document a 7 percent gap in willingness to pay for crime reduction between people who under- and over-estimate the murder rate, we find that this gap can be wholly eliminated by informing them about the actual level of crime. On average, our estimates suggest that households are willing to contribute around $140 per year for a 20 percent reduction in homicide. This individual-level predisposition would translate into additional investment in public security efforts of up to 0.5 percent of GDP.

JEL classifications: K42, H53, H27
Keywords: Willingness to pay, Cost of crime, Latin America, United States

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1 Introduction

Latin America has more crime than any other major world region, with notably high levels of homicide persisting since the 1950s (UNODC, 2013).[1] Crime and public security is also usually considered among the top policy priorities in most Latin American countries (Aboal et al., 2016; Latinobarómetro, 2019). After more than 20 years of continuous decline, crime has also become a growing concern in the United States. Recent advances in evidence-based policing strategies are making the set of tools available for policymakers to control criminal activity substantially larger than in the past,[2] but these interventions require support from the population and additional public investment. Recent episodes favoring "defunding the police" in the United States, and the evidence that low trust generates lower willingness to support the police (Keefer et al., 2022; Keefer and Scartascini, 2022) may jeopardize those efforts. Thus, knowing whether the public is willing to contribute to effective public policies in this area is very relevant for understanding if the region will be able to exit the high crime trap. In this paper we provide novel evidence on this subject from six countries: Argentina, Brazil, Chile, Colombia, Mexico, and the United States.

We conduct a contingent valuation survey experiment in each of these countries to elicit preferences for public contributions to crime reduction programs. In addition to providing comparable estimates across countries, our survey allows us to compare the willingness to contribute according to the type of criminal activity: homicide, robbery, and theft. We find that across all groups and within each country, the public is willing to contribute more for reducing the more serious crimes. For example, when respondents are exposed to value crime reductions of 10 or 30 percent–equally distributed–they are willing to contribute, on average, USD $140 for a reduction in homicide, USD $134 for a similar reduction in robbery, and USD $124 for a similar proportional decline in theft.[3]

We find that the average annual willingness to contribute per household varies across countries. For instance, in the case of homicide, the largest willingness to contribute is $169 among Argentines, and the smallest among Colombians at $115. We also observe some differences across groups in the population. For example, highly educated respondents are willing to contribute $146 on average, while females and those over 40 years old are willing to contribute slightly less than the average individual ($135). We estimate a price elasticity of contribution close to -0.9. Moreover, we document an important decrease in returns for crime reduction: respondents who were offered a 30 percent crime reduction were willing to contribute around 10 percent more than those who were offered a 10 percent crime reduction. This result suggests an elasticity of contribution to crime reduction of 0.05. Aggregating the individual

[1] As a reference, according to UNODC statistics, the annual homicide rate in South America has been over 20 homicides per 100,000 people since the early 1990s, which is three times the global rate.

[2] For a review of the literature on deterrence see Chalfin and McCrary (2017) and Nagin et al. (2013). More recently, Doleac (2019) offers an interesting review of the evidence on reducing criminal behavior among existing offenders.

[3] All dollar values given in 2019 USD throughout.

average contributions, we find that in most countries households are willing to contribute additional resources that are equivalent to an amount between 0.4 and 0.5 percent of national GDP.

In principle, contingent valuation studies can uncover public preferences on a good or service for which there is no clear market valuation. However, placing a monetary value on goods such as public safety or the reduction in criminal victimization requires the imposition of an important set of assumptions.[4] In particular, contingent valuation has a long and controversial history in environmental economics.[5] While contingent valuation studies are usually criticized for being based on assessments that are divorced from personal budget considerations, they have the advantage of potentially including all costs associated with criminal activity.[6] Our research design takes into account some of the common criticisms to increase the validity of the approach. For example, our respondents were warned that the amount of money they state as a contribution will be paid as a tax, and that it could be alternatively spent on other needs instead. We find that individuals who were offered a larger crime reduction are willing to contribute significantly more, which reduces concerns about the potential limited ability of respondents to weigh the magnitude of the program benefit (scope bias). Additionally, although we do observe significant differences in contributions across groups based on default values given within the survey, we observe that these differences are no longer significant when comparing willingness to contribute at the extensive margin.

Our paper also makes an important contribution about the role of information to the contingent valuation literature in the specific context of crime. Information can play a crucial role in crime WTP estimates because misperceptions about crime and the level of criminal activity are ubiquitous (Esberg and Mummolo, 2018; Ajzenman et al., 2020). We focus here on how specific pieces of information affect respondents' willingness to pay. We do so by conducting two experiments. First, we examine whether respondents are sensitive to the type of information provided prior to the survey. In particular, we randomly allocate a set of respondents to read a crime-related news item *before* they went through the WTP survey module. The content of the news was adapted to describe a crime that took place in the capital city of their country of residence (see Appendix). The idea was to assess how sensitive WTP estimates are to the type of information to which they are regularly being exposed. We find that, on average, WTP among those who were exposed to crime-related news content was 5 percent larger (Gingerich and Scartascini, 2022; Mastrorocco and Minale, 2016). This is important because there is plenty of evidence showing that news consumption could affect people's beliefs about levels of crime

[4]See Chalfin (2015) and Domínguez and Raphael (2015) for a discussion about the role of the cost-of-crime literature and the advantages and shortcomings of each of the available methods. Among the examples using contingent valuation studies to measure the cost-of-crime, see Cook et al. (2000), Ludwig and Cook (2001), Zarkin et al. (2000), and Cohen et al. (2004).

[5]The Journal of Economic Perspectives has published two symposia on this issue. For some references, see Hanemann (1994), Diamond and Hausman (1994), Hausman (2012) and Carson (2012)

[6]If respondents are effectively knowledgeable about the victimization risk, they may consider all direct and indirect costs, including the passive-use value associated with a lower victimization risk in others (Domínguez and Raphael, 2015).

and those beliefs may well diverge from reality.[7]

We examine whether WTP differs between those who tend to overestimate the frequency of crimes and those who systematically believe that the level of crime is lower than its actual value. All respondents in our study were asked what they believe was the level of crime in their country. This individual estimation allows us to create two specific groups *within* countries: respondents who over- and under-estimate crime. We document an important gap in WTP between these two groups. This is important since the level of bias can have significant consequences in terms of the ability of WTP estimates to elicit the public value of crime reduction, especially considering the tendency of the public to overstate the level of crime (Esberg and Mummolo, 2018). We find that those who overestimate crime are willing to contribute $10 more than those who underestimate crime (a difference of about 7 percent.)

We then further examine the gap between those who over- and under-estimate the level of crime by conducting an additional experiment. We randomly allocate another group of respondents to a treatment that provides the actual number of weekly homicides officially reported for each country in the previous year. By providing this information, we can evaluate whether we can reduce the WTP gap across respondents in relation to crime (mis)perceptions. The results reveal that the 7 percent gap disappears once respondents are exposed to information about the actual level of crime.

Our paper also makes an important contribution regarding public preferences for crime control policies in places other than the United States and Europe, where most of the empirical evidence has been focused (for example, Galvin et al. (2018) evaluate willingness-to-pay for victim compensation in the United States).[8] An important exception in the literature is Picasso and Cohen (2019), who evaluate the cost of homicide in Argentina by conducting a discrete choice experiment (DCE). We contribute to the literature by conducting a simultaneous and comparable survey across six countries. That way, we can benchmark our results with the existing literature for the United States and evaluate whether there are substantive differences relative to a context where much of the cost-of-crime literature has been developed. While we do not find substantial differences between the United States and the rest of the countries as a group in terms of average willingness-to-pay, we do find some other interesting differences in the responses. In general, respondents in the United States tend to present higher differences in the amount they are willing to contribute across types of crimes, and according to the level of crime reduction that is offered (30 percent vs 10 percent).[9]

There are many specific features of the Latin American context that makes it attractive to

[7]While violent crime has been falling steadily since the early 1990s in the United States, more than 60 percent of people interviewed responded that crime is higher than the year before in 23 of the past 27 year-rounds of Gallup (Gallup, 2022).

[8]Studies outside the United States include Atkinson et al. (2005) in the United Kingdom and Teixeira and Soeiro (2013) in Portugal.

[9]Our estimates for the United States seem a priori slightly lower than those in Bishop and Murphy (2011) using a dynamic hedonic model. However, the two set of results are hard to compare because we did not specify a temporal dimension for crime reduction, while Bishop and Murphy (2011) did.

compare these kinds of estimates with previous findings in the literature. For example, levels of trust in the police are highly divergent in our sample.[10] Trust has been found to affect citizens' willingness to provide additional resources for certain public policies (Keefer et al., 2018, 2022), and it has also been found to affect the demand for public policies (Cafferata and Scartascini, 2021). An important question is thus whether respondents in places that exhibit a substantially lower level of confidence in local enforcement agencies would be willing to support a higher level of spending on crime control policies. We do not find important differences in that sense. One potential reason is that the survey asks citizens about their willingness to contribute for a general reduction in crime instead of willingness to contribute for increasing the number of police or a set of specific policies regardless of the outcome.[11]

We do find differences in an important dimension, levels of crime reported in each country. This leads to substantial differences in terms of the size of the implied cost-of-homicide associated with the average contribution across countries. In countries like Brazil, Colombia and Mexico, where the annual homicide rate is between 20 and 30 crimes per 100,000 inhabitants, we find that the cost of a homicide is between $630k and $930k per incident. By contrast, in countries like Argentina, Chile and the United States, where the annual homicide rate is an order of magnitude smaller–between 3 and 6 incidents per 100,000 people–the implied cost-of-homicide is much larger, between $4 and $6 million. We discuss the implications of this disparity across countries and its connection with the value of statistical life literature.

Our estimates allow us to compute the magnitude of the aggregate average contribution. Our estimates range between 0.4 and 0.5 percent of national GDP in countries like Argentina, Brazil, Colombia and Mexico, where GDP per capita ranges between $6.5k and $9k, 0.23 percent in Chile, where GDP per capita is $5k, and 0.1 percent of GDP in the United States, where GDP per capita is $65k. Overall, these estimates confirm that public safety is highly regarded in the region and that individuals are willing to spend significant amounts for crime abatement, but the valuation may depend on the specific context of each country.

2 Context and Description of the Survey

We partnered with the Latin America Public Opinion Project at Vanderbilt University (LAPOP) to collect data in six countries in 2019: Argentina, Brazil, Chile, Colombia, Mexico and the United States. In all countries the survey was conducted online based on a panel of respondents managed by Netquest. To approximate a random target sample, the selection of panelists was based on all socio-demographic variables common between panel records (Netquest) and census records (IPUMS). The main constraint on the set of variables was the availability of variables

[10] While 69 percent of adults worldwide have confidence in their local police, only 49 percent of individuals do in Latin America and the Caribbean (Gallup, 2020). These differences are even higher when we compare the Latin American countries in our sample with the United States. (about 30 percentage points).

[11] Cafferata and Scartascini (2021) finds that there is a positive correlation between trust and willingness to contribute more resources to the police.

in public microdata.[12] Netquest sent out batches of invitations and the LAPOP re-matched panelists to unfilled target sample slots. The process was repeated to approximately fill the target sample and finally reweighted to population using post-stratification weights.

The set of countries includes Argentina, Chile and the United States, where the homicide rate is similar to the global average (around 6 homicides per 100,000 people), and Brazil, Colombia and Mexico, which are among the countries with the highest homicide rates in the world (above 20 homicides per 100,000 people). These are also countries with high internet penetration rates, and places where the survey agency considered it more likely to obtain a representative sample of the population.

The questionnaire was designed to elicit information about household willingness to pay to reduce crime (referendum design –yes/no answers to different payment options). After validating each respondent and collecting information about household demographics and characteristics, we prompt the survey questions with the following information that describes the status quo:

> *Now, we will ask you about how much of your own money you would be willing to pay to reduce crime in your community.*[13] *For each question, you have to answer Yes/No to a proposal that would require your household and each member of your community to pay. Please, keep in mind that the amount of money you agree to pay could be alternatively spent on other personal consumption goods such as food, clothes, entertainment, or anything else you may need.*
>
> *Last year, a new crime prevention program successfully reduced the number of homicides in your community by 10 (30) percent. Would you be willing to pay $100 ($150) in annual additional taxes to keep this program in place?*

Respondents were randomly allocated to one of the four versions of the survey: i) where the starting value was $100 and the proposed crime reduction was 10 percent; ii) where the starting value was $100 and the proposed crime reduction was 30 percent; iii) where the starting value was $150 and the proposed crime reduction was 10 percent; and iv) where the starting value was $150 and the proposed crime reduction was 30 percent. After the first valuation questions, we proceeded with a sequence of referendum questions to identify the specific range of values that each respondent is willing to contribute for a given crime reduction. For example, respondents who answered positively the $100 ($150) question were asked if they were willing to pay $200 ($250) following the Gabor-Granger method with ranges between the following values: {min, $10, $25, $60, $100, $150, $200, $250, $300, max}. All values were asked in local currency adjusted by PPP. The same procedure undertaken for homicides was then performed for armed robbery and theft.

Table 1 provides summary statistics and compares the four respondent groups (Table A2 in

[12] Among the variables used to match target and panel records are gender, age, educational level, employment status, number of persons in each household, and a set of characteristics specifically available for each country.

[13] Following Cohen et al. (2004) we did not specify the scope of the word community and leave that definition to the respondent which could reflect a combination of interactions with her family, friends, coworkers, or any other relevant group.

the Appendix shows the summary statistics by country). The sample includes 3,639 respondents who were approximately equally distributed across the six countries. We collected information for the entire sample on a set of important characteristics such as gender, age, education, and their estimation of the level of homicides in their country.[14] We observe no statistical significant difference ($p < 0.05$) in any observable characteristics, including the response time they took to answer the survey. We do find differences for our dependent variables. WTP is a discrete variable that represents the lower bound of the range that a respondent asserts they are willing to contribute for a given reduction in crime. We find important differences for whether the respondent was asked about a 10 or 30 percent reduction across the three types of crime, which suggests that individuals are willing to contribute more if the proposed reduction in crime is larger. Similarly, we also find that individuals are responsive to the initial suggested contribution, which suggests some degree of anchoring bias (Tversky and Kahneman, 1974). We will come back to this issue in Section 3.3.

In order to further examine the validity and robustness of these WTP estimates and the role of information on shaping respondent's WTP, we conducted two experiments by randomly allocating specific pieces of information to two additional groups. To be specific, we designed these two experiments by incorporating a set of questions *before* the WTP module in two additional samples of respondents in each country. In the first case, a set of individuals were exposed to reading the content of a crime-related news item that was adapted to describing a crime that (apparently) took place in their corresponding country capital city's downtown. The treated individuals in the second experiment were those who–after providing their own estimates on the level of crime in their countries–were exposed to information about the actual level of crime. Thus, in addition to the 3,639 individuals (control group sample) described in Table 1, the full (Experimental) sample of the study considers 1,825 additional respondents who were exposed to the crime-related news treatment, and 1,824 individuals who were provided the information on the actual level of crime for their country.[15] For these two additional treatment arms, the control group is the main sample described in Table 1 (Table A1 shows the balance for the treatment and control groups).

[14] We use this information to characterize the population in two groups: under- and over-estimate of the level of crime based on whether they estimate a number above or below the actual level of crime in their respective country. In order to avoid internet searches, we ask respondents the weekly number of homicides they believe took place the last year in their country. As a reference, they were provided two specific points: weekly number of crimes in Europe and Latin America *if* they had the population of their corresponding country. In that sense, respondents guesses were likely an estimate of how far apart from Europe or Latin America was their country in terms of the frequency of homicides.

[15] Table A1 in the Online Appendix compares the samples exposed to both treatment arms, and we find no differences in the main individual characteristics, except in their average willingness to pay estimates, which is one of the outcomes of interest of our study

3 Empirical Analysis

In this section we describe our basic estimates of households' willingness to contribute to crime reduction. We show aggregate and country-specific estimates. In order to elicit WTP estimates that are representative of the national population, we restrict the analysis to the control group of respondents who were not exposed to specific pieces of information. In Section 4 we expand this analysis to the full experimental survey, where we also evaluate the role of information in shaping public willingness to contribute to reduce crime.

3.1 WTP by Type of Crime

How much are citizens willing to pay to reduce crime? Figure 1 shows the proportion of respondents who are willing to pay different amounts to reduce each type of crime in each of the six countries. For each crime category, respondents were asked "Would you be willing to pay 'X' to reduce crime 'C' by 'P' percent?" We plot the share of respondents who affirmatively answered the amount indicated on the vertical axis by pooling together questions considering crime reductions of 10 and 30 percent. The figure shows important differences based on the seriousness of the criminal activity. For example, for each price and country, we observe a larger share of the population willing to contribute to preventing homicide than robbery. Similarly, at each price, we observe a larger share of the population willing to contribute to reducing robbery than theft. The figure also shows that the willingness to contribute varies across countries. For example, while 70% of the respondents are willing to contribute $100 to reducing homicides in Argentina (Figure 1(a)), that share is lower than 60% in Brazil (Figure 1(b)).

3.2 WTP by Starting Value and Proposed Reduction in Crime

We also find differences in willingness to pay by comparing groups who were randomly allocated to different initial conditions. First, we compare groups of people who were randomly offered different degrees of crime reduction. In this case, we exploit the fact that, for each type of crime, half of the sample were asked about a 30 percent reduction, while the other half was asked about a 10 percent reduction. Figure 2 shows differences for each country in terms of willingness to contribute for reduction in homicide. In the Appendix, Figures A3 and A4 present the evidence for robbery and theft. In all these cases, the lines that represent the preferences of the group which considered the proposal to reduce crime by 30 percent dominate the lines that represents those who were offered a 10 percent reduction. That is, as expected, citizens are willing to contribute more to reducing crime by 30 percent than 10 percent. The differences across countries remain. Again, in Argentina the share of citizens willing to contribute $100 is about 10 percentage points higher than in Brazil for both levels of crime reduction.

Second, we compare individuals who were offered different starting values in the referendum questions. Half of our sample started the referendum for each type of crime by considering a

willingness to contribute of $150 while the other half started at $100. Figure 3 shows differences for each country in terms of willingness to contribute to reduce homicide. In the Appendix, Figure A1 and Figure A2 present the evidence for robbery and theft. In most cases, four out of six countries, lines cross each other at different prices. This indicates that there is little to no anchoring effect caused by the initial condition. In Argentina and Brazil, however, the figure suggests that the initial value affects their valuation, as those who started at a value of $150 are willing to contribute more at all prices.[16]

3.3 Results at the Intensive and Extensive Margins

We expand the analysis of the previous figures by examining results at both the extensive and intensive margin of contribution. In particular, for each type of crime, we consider the following model:

$$y_i^* = \alpha + \beta_1 1\{Reduction_i = 30\%\}_i + \beta_2 1\{Start_i = 150\} + \Phi_c + \mathbf{X}\Delta + \epsilon_i \tag{1}$$

where $1\{Reduction = 30\%\}$, and $1\{Start = 150\}$ represent indicator functions for whether respondent i was offered a 30 percent reduction in crime or not, and whether the initial value of the referendum was $150, respectively. The baseline specification considers a respondent being offered a program that reduces crime by 10 percent and the referendum questions starting at $100. We also include interaction terms in some specifications to examine whether respondents that received both specific pieces of information react differently. Φ_c represents country fixed effects. In all specifications, we include the following set of individual control variables ($\mathbf{X}$): income, level of education, gender and age.

We model y_i^* as a latent variable that indicates the true willingness to contribute of individual i, following Berlinski and Busso (2016). Instead of observing the actual value y_i^*, we observe the interval $[l_{qj}, u_{qj})$. We model the extensive margin decision using a linear probability model; the dependent variable is a dummy indicator for whether respondent i is willing to contribute a non-zero amount or not. For the intensive margin decision we use an interval regression.[17]

In Table 2 we show results on the intensive and extensive margins. In both panels, and across all crime categories, we observe that the coefficient of $1\{Reduction = 30\%\}$ is significant at conventional levels, which means that larger reductions in crime imply a higher willingness to pay. Panel A displays results at the intensive margin. On average, individuals are willing to pay around $16 more when the proposed crime reduction is 30 percent, relative to the average contribution of around $140 (see Table 3). In a way, this coefficient offers a direct test of one of the common criticisms of contingent valuation studies: scope bias. This bias suggests that

[16]The fact that there is line crossing in Argentina for the case of robberies mitigates some of our potential concerns.

[17]In our case, this structure imposes a normal distribution of the error term ϵ_i which allows for certain individuals to state a negative contribution.

respondents are not responsive to the magnitude of the good offered and responses do not differ if they are being offered a large or small amount of the good. In our case, we do find evidence that the public is willing to pay a higher amount for a larger reduction in crime.[18] These coefficients also suggest an elasticity of around 0.05.[19] The fact that respondents who started the referendum questions at $150–as opposed to those who started at $100–are willing to contribute around $9 more suggests the presence of anchoring bias in this estimation. However, in the Online Appendix Table 4 we display results for a larger sample–including two additional treatment arms–and observe that coefficients associated with a larger initial bid are smaller and no longer significant at conventional levels.

Panel B in Table 2 shows results at the extensive margin which represents the proportion of individuals that are willing to contribute a non-zero amount. In this case, individuals are between 3 and 5 percentage points more likely to contribute when the proposed reduction is 30 percent, as opposed to those offered a crime reduction of 10 percent. Unlike the results at the intensive margin, the fact that the coefficient $1\{Start = 150\}$ is not significantly different from zero suggests that the presence of anchoring bias is limited.

4 Discussion: The Role of Information and the Implied Cost of Crime

In addition to providing comparable empirical estimates of willingness to contribute for crime reduction across countries, we discuss their validity and robustness. We give specific attention to the role played by information. We do so by conducting two additional experiments: i) by exposing a set of individuals to similar in content crime-related news that may have taken place in their country of residence, and (ii) correcting their prior information on the actual level of homicides in their country of residence. This analysis may provide specific guidelines to future researchers on survey design and how careful they should be in including additional questions. We conclude this section by including implied cost-of-crime estimates for each country.

4.1 How Sensitive Are WTP Estimates to Individual Characteristics and Exposure to Crime-Related News Content?

By using estimates from equation 1, we can compute the expected willingness to contribute, and we report the mean and median (predicted) willingness to contribute for households in different subsamples. Table 3 shows the mean and median willingness to contribute, as well as the price elasticity of contributions estimated by following the procedure suggested by Berlinski

[18] Picasso and Cohen (2019) state that Piquero et al. (2011) is the only contingent valuation study that has conducted the scope test.

[19] We compute these elasticities as the change in willingness to pay relative to the proposed reductions in crime. We use the average contribution in Table 3 in the calculation. Berlinski and Busso (2016) show (for educational purposes) a similar elasticity of around 0.2, which is four times larger than the one we find.

and Busso (2016). The price elasticity for contributions toward reducing crime is around -0.8 to -1.[20] Although there is an important degree of similarity across crime types, we do observe some degree of heterogeneity across respondents. On average, females and individuals older than 40 are willing to contribute less than the average individual, while highly educated individuals are willing to contribute more. Altogether, differences across individual characteristics are relatively small, and they represent around 4 percent of the amount the average individual is willing to contribute. More notable differences can be found across countries which may reflect a combination of a set of factors such as differences in income on the one hand, and differences in terms of the risk of victimization on the other. As a result, we observe that willingness to pay across countries may differ up to 17 percent from the average level.

In addition, we investigate whether individuals who are exposed to crime-related news are willing to contribute more or not to examine heterogeneity by individual characteristics. We do so by randomly exposing an additional group of respondents to crime-related news content adapted to the specific country of residence (see Figure A5 for the case of the United States.) Column 4 in Table 5 shows that, on average, individuals who were exposed to this type of information are willing to contribute 5 percent more (extra $6) to reduce homicides.[21] We also show estimates by splitting the sample in the control group into two groups: individuals who over- and under-estimate homicide rate in their country of residence. Interestingly, the WTP media and median value for group of exposed to a crime news item resembles what we observe for the group who overestimate homicides in their country of residence. This suggests that WTP estimates are responsive to the level and type of information to which individuals have been previously exposed.

4.2 How Sensitive Are WTP Estimates to Crime (Mis)perceptions?

A critical concern of WTP estimates has to do with individuals' ability to assess the risk of being victimized. We explore this issue by comparing WTP estimates for crime reduction in two groups, those who tend to overestimate the frequency of homicides and those who tend to underestimate them. We include in our survey a specific question where respondents had to guess the number of weekly homicides that took place in their country last year (see Figure A7 for the specific question.) Columns 2 and 3 in Table 5 show that WTP also differ by individuals ability to estimate the actual number of homicides that take place in their countries. On average, individuals who overestimate the number of homicides are willing to pay 7 percent more (an extra $9) than their underestimating counterparts.

Finally, we explore whether the gap in WTP to reduce crime between the under- and over-estimating groups can be attenuated by providing accurate information about the actual level

[20] Interestingly, Berlinski and Busso (2016) report a price elasticity of -0.98 in the context of quality of educational outcomes.

[21] In Online Appendix Table 4 we show regression estimates for having being exposed to crime news and find a coefficient of similar magnitude.

of crime on their country of residence. In practice, we designed a specific treatment for an additional group: after respondents answered how many weekly homicides take place in their country, we provided the actual number to a subgroup of them (see Figure A6 for an example from the U.S. survey.) Similar to the previous group, we then asked respondents the same set of questions to estimate WTP for crime reduction. Thus, by virtuous of the random allocation we can test whether providing the actual information modified the gap between under- and over-estimating respondents. Unlike what we observe in columns 2 and 3, Columns 5 and 6 in Table 5 show that WTP does not differ by individuals ability to estimate the actual number of homicides that take place in their countries. Differences across groups are fully attenuated after providing the right information. Notice that the treatment seems to move respondents preferences in opposing directions; in the case of the under-estimating group the treatment moves individual's prior information regarding homicides upwards, whereas prior estimates are moved downwards for the over-estimating group.

4.3 Cost-of-Crime Estimates

A final way to examine willingness-to-pay for crime reduction estimates can be in terms of the implied cost of homicide, and the percentage of GDP spending that represents in each country. Following Cohen et al. (2004) we can use our estimates to compute an implied public valuation of the cost of crime. By using the average contribution of Table 3 and the homicide rate of each country, we can calculate the implied cost of a homicide. We do so by dividing the country-level aggregate willingness to contribute and the average number of homicides proposed to be reduced. Obviously, this calculation will be biased if the perceived risk of crime differs substantially from the number reported in official statistics. For that reason we focus this analysis on homicides, which is the type of crime least subject to reporting bias.

Table 6 displays the implied cost of homicide in each country. We can see how these country-level estimates compare to others previously found in the literature in Argentina and the United States. For example, in Argentina, Picasso and Cohen (2019), by conducting a discrete choice model to elicit public willingness to pay to reduce crime, found the cost of homicide to be around $1.6 million. By contrast, our estimates in the United States are considerably smaller than the updated value of $13 million previously found by Cohen et al. (2004).

Our cross-country estimates of the cost-of-homicide differ considerably, and a key factor seems to be the level of homicides in each country. On the one hand, we observe estimates between $4 and $6 million in countries with an annual homicide rate of around 4 incidents per 100,000 people in a given year such as Argentina, Chile and the United States. On the other hand, in countries where the annual homicide rate is around five times higher (between 21 and 29 homicides per 100,000 inhabitants), such as Brazil, Mexico, and Colombia, the implied estimates of the cost of homicide are much smaller (around $700k).

Of course, from a normative standpoint, it may not be clear how to reconcile such disparities

in the monetary value of the same kind of incident only on the basis of different crime rates. Another important consideration is *how* the public perceives that a reduction in crime can be achieved in each particular context. Since we provide no details on the characteristics of the intervention, our estimates reflect public willingness to contribute in general. As such, they implicitly incorporate, among other things, public beliefs about the potential policies that need to be in place to achieve a proposed reduction in crime, and the public valuation of those policies (e.g., in some places people may prefer investments in rehabilitation policies as opposed to longer prison sentences). But those beliefs and valuations of potential policies to be implemented can differ by country. For example, by conducting similar contingent valuation surveys, Nagin et al. (2006) and Piquero and Steinberg (2010) show that holding constant the impact of the program, the public is willing to pay more for rehabilitation programs as opposed to an alternative intervention that favors incarceration. Interestingly, in the case of Piquero and Steinberg (2010)–who conducted the same survey in the states of Pennsylvania, Illinois, Louisiana, and Washington–estimates for rehabilitation policies across states are similar to each other, whereas those for incarceration differ substantially–with much larger support in Louisiana. In that sense, our estimates may also reflect differences in how the public values the implicit set of policies available to control crime in each particular context.

In a way, disparities across countries can also connect with perceptions regarding whose life is at risk or, more generally, in terms of how informed the public is about the risk of victimization in each country. Some of these issues have been also documented in the value of statistical life literature (Ashenfelter, 2006). Value of statistical life (VSL) estimates are sensitive to the income level of the respondent pool. For example, two meta-analysis studies suggest a large income elasticity of VSL, with values ranging between 0.8 and 1 (Bellavance et al., 2009; Miller, 2000).[22] Viscusi (2003) also find that differences arise within countries when observing a lower VSL among Black as compared to white workers. In that sense, our cross-country differences may arise from multiple sources that affect how much the public is willing to pay for a particular reduction in homicide risk, and where differences in homicide rates seem to be a first order factor.

Finally, in Table 6 we display the amount that the levels of individual contributions would represent nationally in terms of national GDP. This is an important policy parameter that may reflect the amount of additional resources that can be spent on effective crime control policies. Our estimates range between 0.4 and 0.5 percent of national GDP in Argentina, Brazil, Colombia, and Mexico, and between 0.1 and 0.2 percent of GDP in the United States and Chile. Considering that these estimates refer to an average 20 percent reduction in homicide, we can also extrapolate these values to infer a total cost of homicide of around 2.5 percent of GDP for the first group of countries and between 0.5 percent and 1 percent of GDP for Chile and the United States.[23] Overall, regardless of the specific assumptions behind these

[22]See also De Blaeij et al. (2003) for a formal meta-analysis of the value of statistical life in the context of road safety.

[23]By using a bottom-up accounting method, Jaitman (2017) finds that the total cost of crime is around 3.5 percent of GDP in Latin America and Caribbean countries. A key distinction is that Jaitman (2017) considers

aggregate measures, they consistently reflect strong public support for additional policies that can effectively prevent and control criminal activity.

5 Conclusions

Although, the majority of citizens in the Americas prefer to lower taxes and afford self-protection measures rather than spend more on public safety policies such as spending more on police (Cafferata and Scartascini, 2021), we find that they are willing to contribute to reducing crime. Our results show that citizens in the six countries we surveyed are willing to contribute substantively (between USD$125 and $140) to reducing crime.

We assess the validity of these estimates. Following the literature guidelines, we examine anchoring bias and do not observe that respondents are necessarily responding to the level of the initial bid. In addition, we find that in most countries citizens' willingness to contribute is responsive to the degree of reduction proposed in a way that is consistent with the theory. However, our estimates suggest substantial decreasing returns to scale (e.g., the extra contribution for reducing crime from 10 to 30 percent is much smaller than the contribution for reducing crime by 10 percent). In that sense, cost-of-crime calculations that are derived from these estimates need to be explicit in the specific variation to which respondents were exposed. In our case, estimates differ by the type of crime, the scale and the level of reduction.

We also show that WTP estimates can be simply altered by exposing respondents to crime-related information that induces them to contribute more. Future researchers should be careful about the type of information they provide to respondents when estimating WTP for crime reduction since one could artificially induce them to contribute more. Finally, although we do find that WTP is sensitive to individuals' characteristics such as ability to assess the actual level of crime, we show that this gap can be fully attenuated by providing the actual information.

These findings offer interesting avenues for future research where a key question is how the public values alternative policies that reduce crime by similar amounts. We have shown that, even in a region where the level of trust in local enforcement agencies is low, the public is willing to spend on crime reduction. But we do not know which crime reduction policies the public are imagining when responding to our evaluation. In practice, we can perform a similar exercise and compare public willingness to pay to reduce crime through *specific* programs. Understanding this is crucial for a region where crime is a top policy concern, and common policy responses such as higher penalties and increasing incarceration are not promising solutions. Latin America exhibits both high levels of incarceration and prison overcrowding, and poor living conditions

the cost of all types of criminal activity by aggregating three main sources: i) social cost of victimization, representing the income loss of homicide victims and the foregone income of the incarcerated population, which accounts for 0.64 percent of GDP; ii) private investment in security, which accounts for 1.37 percent of GDP, and iii) public spending on the judiciary, the police and the prison system, which collectively accounts for 1.51 percent of GDP. Aboal et al. (2016), who also use a bottom-up accounting method, find estimates of around 3 percent GDP in countries like Costa Rica, Uruguay and Chile, and 9 percent and 10 percent of GDP in Paraguay and Honduras, respectively.

of inmates are usually associated with parole violations and recidivism (Vilalta and Fondevila, 2019). Nowadays, policymakers have a more nuanced set of policy tools at their disposal, and future research can help identify how the public values each of the tools available. In that sense, we may deliver a robust agenda in terms of the best policy options to reduce crime and the set of policies that the public values the most.

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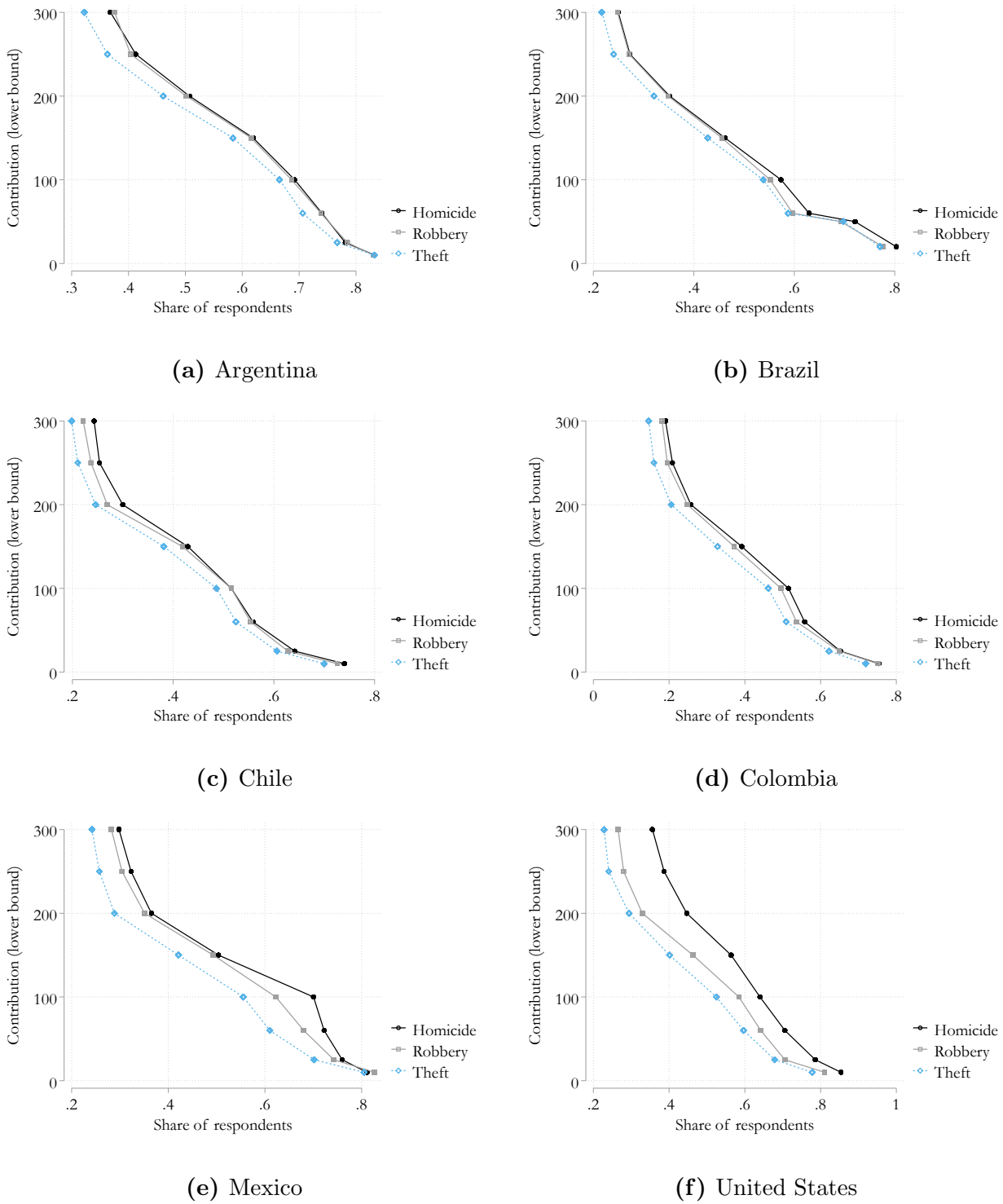
Tables and Figures

Figure 1. Willingness to pay to reduce crime by type of crime-activity across countries



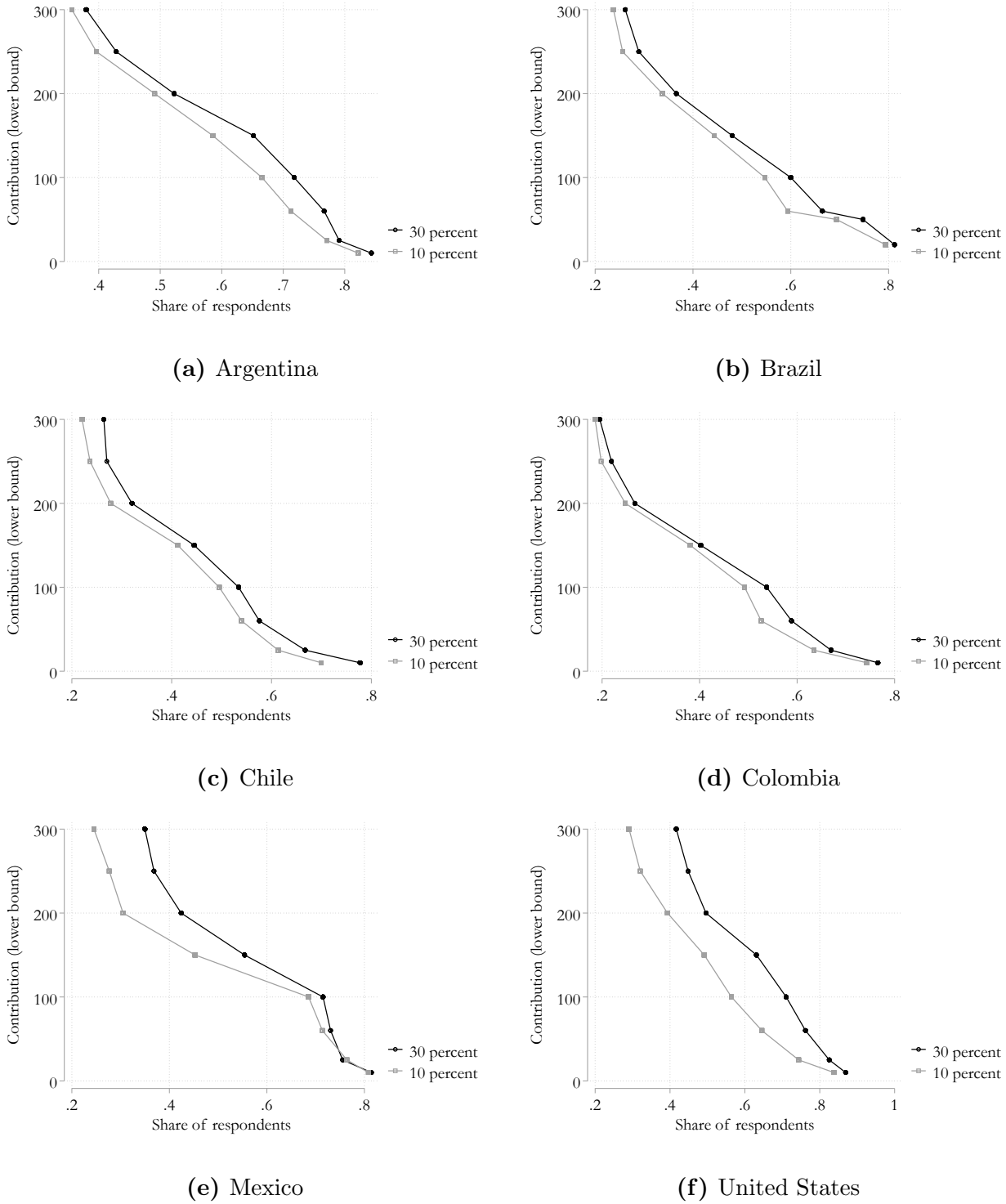
(a) Argentina **(b)** Brazil

(c) Chile **(d)** Colombia

(e) Mexico **(f)** United States

Note: Each figure shows the proportion of respondents who are willing to pay different amounts to reduce each crime category using the control group sample of respondents. The black, gray and blue lines represent responses associated with homicide, robbery and theft, respectively. For each crime category, respondents were asked 'Would you be willing to pay "X" to reduce crime "C" by "P" percent?' We plot the share of respondents that affirmatively answered the amount indicated on the vertical axis by pooling together questions considering crime reductions of 10 and 30 percent.

Figure 2. Willingness to pay to reduce homicide by percentage of crime reduction across countries



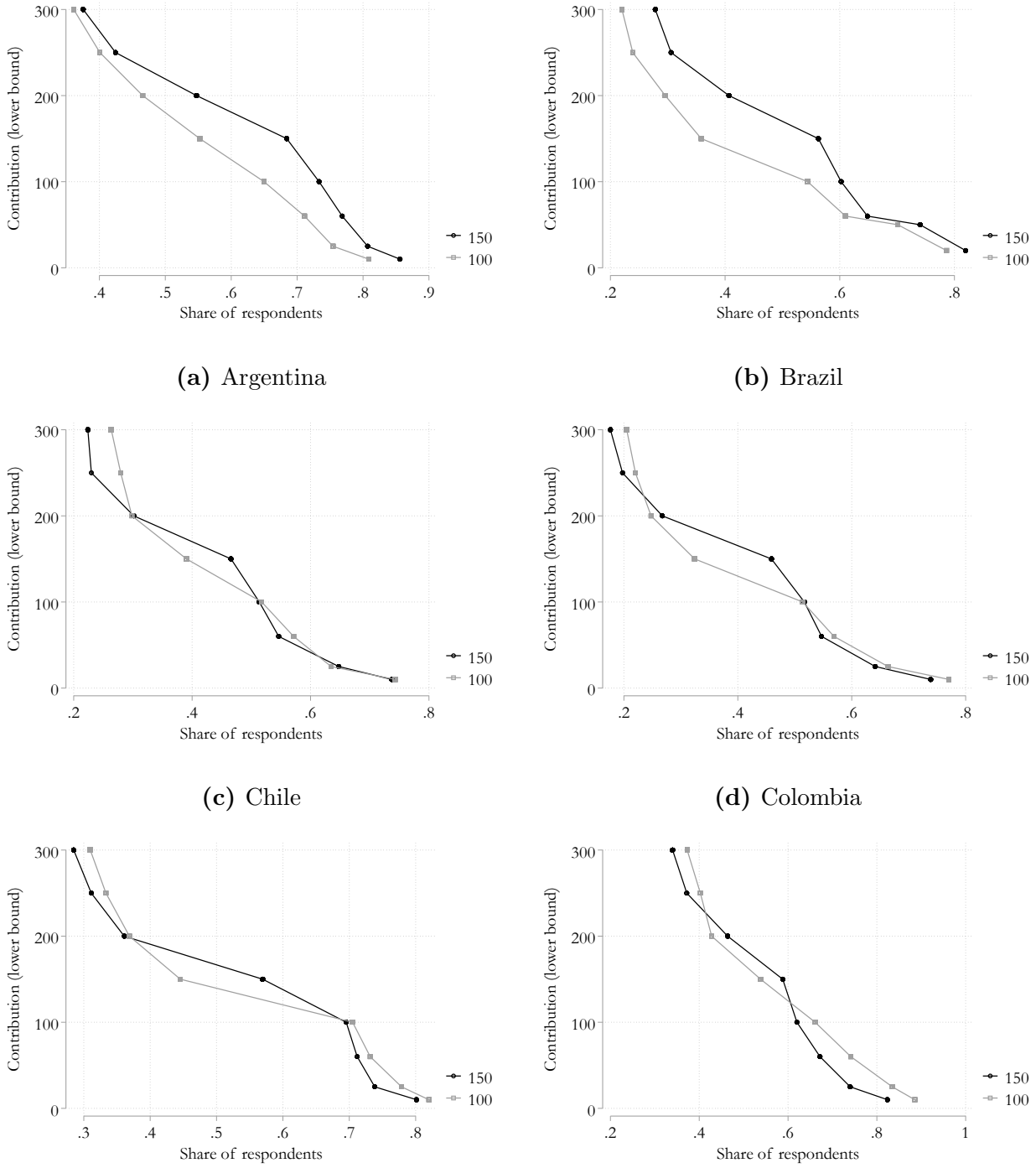
(a) Argentina **(b)** Brazil

(c) Chile **(d)** Colombia

(e) Mexico **(f)** United States

Note: Each figure shows the proportion of respondents who are willing to pay different amounts to reduce homicide using the control group sample of respondents. The black and gray lines represent responses associated with the degree of reduction proposed to each subsample of respondents. Individuals were asked 'Would you be willing to pay "X" to reduce crime "C" by "P" percent?' We plot the share of respondents that affirmatively answered the amount indicated on the vertical axis.

Figure 3. Willingness to pay to reduce homicide by survey's starting value across countries



Note: Each figure shows the proportion of respondents who are willing to pay different amounts to reduce homicide using the control group sample of respondents. The black and gray lines represent responses associated with the survey's starting value for each subsample of respondents. Individuals were asked 'Would you be willing to pay "X" to reduce crime "C" by "P" percent?' We plot the share of respondents that affirmatively answered the amount indicated on the vertical axis by pooling together questions about crime reductions of 10 and 30 percent.

TABLE 1. Balance across Respondent and Survey Characteristics: Control Group Sample

	Crime reduction		Diff	Starting Price		Diff
	10%	30%	p-value	100	150	p-value
	(1)	(2)	(1)-(2)	(3)	(4)	(3)-(4)
Female	0.548	0.531	0.303	0.554	0.525	0.079
	(0.012)	(0.012)		(0.012)	(0.012)	
Age	44.398	44.220	0.737	44.469	44.147	0.544
	(0.375)	(0.375)		(0.377)	(0.374)	
Age sq.	2222.061	2216.236	0.908	2234.498	2203.805	0.542
	(35.642)	(35.527)		(35.914)	(35.264)	
Primary Ed. or less	0.057	0.047	0.181	0.055	0.048	0.339
	(0.005)	(0.005)		(0.005)	(0.005)	
Some HS Ed.	0.571	0.569	0.874	0.569	0.571	0.908
	(0.012)	(0.011)		(0.012)	(0.012)	
Complete HS Ed.	0.189	0.184	0.734	0.180	0.193	0.323
	(0.009)	(0.009)		(0.009)	(0.009)	
Some College Ed.	0.372	0.384	0.439	0.376	0.381	0.750
	(0.011)	(0.011)		(0.011)	(0.011)	
Complete College Ed.	0.172	0.158	0.258	0.162	0.167	0.703
	(0.009)	(0.008)		(0.009)	(0.009)	
Response time (hours)	0.052	0.053	0.877	0.052	0.053	0.928
	(0.005)	(0.005)		(0.005)	(0.005)	
Overestimate homicide	0.269	0.275	0.721	0.265	0.279	0.334
	(0.011)	(0.010)		(0.010)	(0.010)	
WTP homicide	129.593	145.813	0.000	134.037	141.672	0.054
	(2.797)	(2.790)		(2.812)	(2.786)	
WTP robbery	121.526	139.467	0.000	126.565	134.765	0.037
	(2.765)	(2.781)		(2.805)	(2.755)	
WTP theft	111.249	127.736	0.000	114.630	124.652	0.009
	(2.682)	(2.734)		(2.700)	(2.729)	
WTP total	362.368	413.016	0.000	375.232	401.089	0.019
	(7.741)	(7.798)		(7.816)	(7.763)	
Observations	1782	1857		1812	1827	

Notes: Table shows descriptive statistics (mean and standard deviations in parentheses) across covariates and some of the main outcomes in the control group sample. For each variable, we compare the four main groups of the survey experiment and report p-values based on the difference across groups. WTP variables use respondents willingness to pay for each group and type of crime activity.

TABLE 2. Responses at the Intensive and Extensive Margins: Control Group Sample

	Homicide		Robbery		Theft	
Panel A: Intensive Margin						
1(Reduction=30%)	14.71***	16.77***	16.11***	18.76***	15.00***	15.37***
	(3.63)	(5.11)	(3.62)	(5.11)	(3.56)	(4.97)
1(Start=150)	7.94**	10.05*	9.03**	11.72**	9.70***	10.07**
	(3.63)	(5.18)	(3.62)	(5.13)	(3.57)	(5.03)
1(Reduction=30%) x 1(Start=150)		-4.14		-5.28		-0.74
		(7.27)		(7.23)		(7.13)
Constant	129.39***	128.34***	121.45***	120.11***	111.73***	111.54***
	(3.14)	(3.63)	(3.14)	(3.63)	(3.04)	(3.49)
Observations	3,639	3,639	3,632	3,632	3,632	3,632
Panel B: Extensive Margin						
1(Reduction=30%)	0.030**	0.045**	0.0280**	0.051***	0.0283**	0.037*
	(0.013)	(0.019)	(0.014)	(0.020)	(0.014)	(0.020)
1(Start=150)	-0.006	0.010	0.013	0.037*	0.006	0.015
	(0.013)	(0.020)	(0.014)	(0.020)	(0.014)	(0.020)
1(Reduction=30%) x 1(Start=150)		-0.031		-0.046*		-0.018
		(0.027)		(0.027)		(0.028)
Constant	0.783***	0.776***	0.764***	0.752***	0.748***	0.743***
	(0.012)	(0.014)	(0.012)	(0.014)	(0.012)	(0.015)
Observations	3,639	3,639	3,632	3,632	3,632	3,632

Notes: Table shows coefficients for different regression specifications, including two specifications for each type of crime activity. All regressions are estimated using the restricted control group sample. Panel A shows results from an interval regression model using the highest interval value each respondent is willing to contribute as the dependent variable. Interval regressions are estimated using Maximum Likelihood. Panel B shows coefficients from a linear probability model using an indicator variable for a whether a respondent is willing to contribute a non-negative amount. Baseline characteristics are a 10 percent crime reduction and $100 for the starting value of the referendum questions. All regressions include a set of control variables and country fixed effects as specified in equation 1. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

TABLE 3. Willingness to Contribute and Price Elasticity for Contribution: Control Group Sample

	Total	Highly Educated	Female	Age > 40	ARG	BRA	CHI	COL	MEX	USA
Panel A: Homicide										
Mean WTP	140.940	146.255	138.383	135.253	169.364	138.755	121.462	115.577	150.654	158.493
	[0.630]***	[1.157]***	[0.846]***	[0.823]***	[1.659]***	[1.467]***	[1.519]***	[1.369]***	[1.534]***	[1.726]***
Median WTP	124.699	173.904	124.569	124.480	223.455	124.437	124.172	124.113	173.917	174.351
	[0.032]***	[0.075]***	[0.038]***	[1.557]***	[0.129]***	[0.115]***	[7.559]***	[12.883]***	[0.041]***	[1.742]***
Elasticity	-0.890	-0.853	-0.906	-0.889	-0.836	-1.052	-0.841	-0.876	-0.945	-0.825
	[0.021]***	[0.000]***	[0.014]***	[0.014]***	[0.021]***	[0.030]***	[0.024]***	[0.026]***	[0.025]***	[0.021]***
Panel B: Robbery										
Mean WTP	134.270	138.427	132.795	127.922	168.071	135.085	117.903	111.393	143.150	135.224
	[0.626]***	[1.179]***	[0.847]***	[0.862]***	[1.638]***	[1.496]***	[1.502]***	[1.368]***	[1.501]***	[1.802]***
Median WTP	124.504	124.753	124.455	124.338	223.375	124.407	124.113	74.804	124.793	124.642
	[0.034]***	[0.076]***	[0.038]***	[2.200]***	[0.130]***	[0.117]***	[7.080]***	[12.243]***	[0.041]***	[3.472]***
Elasticity	-0.884	-0.855	-0.898	-0.875	-0.839	-1.019	-0.857	-0.867	-0.887	-0.873
	[0.012]***	[0.017]***	[0.014]***	[0.014]***	[0.022]***	[0.031]***	[0.026]***	[0.026]***	[0.022]***	[0.026]***
Panel C: Theft										
Mean WTP	124.323	124.745	124.356	118.808	159.805	130.048	110.029	101.404	126.912	122.411
	[0.627]***	[1.199]***	[0.873]***	[0.821]***	[1.593]***	[1.475]***	[1.503]***	[1.435]***	[1.545]***	[1.705]***
Median WTP	124.148	124.271	124.197	124.098	174.506	124.357	74.702	74.476	124.298	124.197
	[0.030]***	[0.079]***	[0.040]***	[2.199]***	[0.130]***	[0.113]***	[8.146]***	[13.978]***	[0.041]***	[2.200]***
Elasticity	-0.894	-0.878	-0.910	-0.890	-0.860	-1.054	-0.862	-0.876	-0.876	-0.875
	[0.014]***	[0.008]***	[0.014]***	[0.015]***	[0.023]***	[0.032]***	[0.028]***	[0.027]***	[0.023]***	[0.028]***

Notes: Table shows mean and median willingness to contribute for households in different samples as well as the price elasticity of contributions, estimated using the control group sample of respondents. Sample of respondents was equally split and offered either a 10 percent or 30 percent reduction in homicide rate. Standard errors in squared brackets are estimated by nonparametric bootstrap with 1,000 repetitions. All monetary values are in 2019 US dollars. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

TABLE 4. Responses at the Intensive and Extensive Margins: Experimental Sample

	(1)	(2)	(3)
Panel A: Intensive Margin			
1(Reduction=30%)	13.057***	13.156***	13.163***
	(2.968)	(2.888)	(2.889)
1(Start=150)	2.926	3.200	3.288
	(2.959)	(2.881)	(2.877)
1(Info=Homicide news)	8.180**	7.967**	8.326**
	(3.585)	(3.512)	(3.489)
1(Info=Homicide data)	-1.222	-1.644	-1.526
	(3.618)	(3.520)	(3.519)
Constant	133.272***	163.263***	206.038***
	(3.248)	(4.309)	(13.216)
Panel B: Extensive Margin			
1(Reduction=30%)	0.030***	0.030***	0.030***
	(0.011)	(0.011)	(0.011)
1(Start=150)	-0.020*	-0.020*	-0.019*
	(0.011)	(0.011)	(0.011)
1(Info=Homicide news)	0.030**	0.029**	0.032**
	(0.013)	(0.013)	(0.013)
1(Info=Homicide data)	0.001	0.001	0.001
	(0.014)	(0.013)	(0.013)
Constant	0.791***	0.837***	1.058***
	(0.014)	(0.016)	(0.056)
Observations	7288	7288	7275
Country FE	No	Yes	Yes
Individual Controls	No	No	Yes

Notes: Table shows coefficients for different regression specifications for homicide. All regressions are estimated using the full experimental sample. Panel A shows results from an interval regression model using the highest interval value each respondent is willing to contribute as the dependent variable. Interval regressions are estimated using Maximum Likelihood. Panel B shows coefficients from a linear probability model using an indicator variable for a whether a respondent is willing to contribute a non-negative amount. Baseline characteristics are a 10 percent crime reduction, $100 for the starting value of the referendum questions and the control group. Individual control variables are specified in equation 1. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

TABLE 5. Willingness to Contribute for Homicide Reduction: Experimental Sample

Homicides	Control Group			News (A)	Data (B)	
	Total	Underest	Overest	Total	Underest	Overest
Mean WTP	140.940***	138.674***	147.847***	146.952***	139.679***	138.728***
	(0.117)	(0.443)	(1.882)	(0.114)	(1.397)	(0.576)
Median WTP	124.699***	124.535***	173.851***	173.923***	124.554***	124.753***
	(0.009)	(0.007)	(0.035)	(0.005)	(0.029)	(0.020)

Notes: Table shows mean and median willingness to contribute for households in different samples. Each group was equally split and offered either a 10 percent or 30 percent reduction in homicide rate. Control group of respondents is the reference sample. News (a) refers to the sample of individuals exposed to a crime-related news prior to answering the survey while Data (B) corresponds to the group of individuals who were provided the information of the actual murder rate of their country. For control and data (B) group samples we display results include two additional sub-groups: under- and over-estimate groups based on whether respondents' estimate was below or above the actual homicide rate on their respective country. Standard errors in parentheses are estimated by nonparametric bootstrap with 1,000 repetitions. All monetary values are in 2019 US dollars. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

TABLE 6. Cost-of-homicide implied by willingness to pay estimates

Country	**Homicide Rate**	**Implied Cost-of-Homicide**	**Aggregate WTP as % GDP**
Argentina	6.14	$ 4,300,194	0.53%
Brazil	29.10	$ 726,333	0.48%
Chile	3.58	$ 4,903,736	0.23%
Colombia	26.26	$ 628,654	0.51%
Mexico	21.66	$ 938,469	0.40%
United States	5.00	$ 6,467,342	0.10%

Notes: Table shows average homicide rate as the annual number of crimes per 100,000 people during 2014-2018. Cost-of-homicide is measured in 2019 USD $ and computed as the country-level aggregate willingness to contribute divided by the average number of homicides proposed to be reduced in the estimation. Table 3 values are considered for the household average contribution using the control group sample of respondents. Aggregate WTP as % GDP represents the total amount people are willing to contribute to reduce crime (on average, for a 20 percent reduction) expressed as a percentage of national GDP. Source: Homicide rates are obtained from UNODC and number of households for each country from UN-population data.

Online Appendix

TABLE A1. Balance across Respondent and Survey Characteristics: Experimental Sample

	Control group	News (A)	Data (B)	Diff p-value		
	(1)	(2)	(3)	(1)-(2)	(1)-(3)	(2)-(3)
Female	0.539	0.529	0.532	0.448	0.588	0.851
	(0.008)	(0.012)	(0.012)			
Age	44.307	45.209	44.154	0.045	0.735	0.041
	(0.265)	(0.365)	(0.367)			
Age sq.	2219.088	2286.415	2195.255	0.116	0.577	0.062
	(25.162)	(34.589)	(34.473)			
Primary Ed. or less	0.052	0.050	0.042	0.774	0.114	0.270
	(0.004)	(0.005)	(0.005)			
Some HS Ed.	0.570	0.581	0.606	0.420	0.011	0.133
	(0.008)	(0.012)	(0.011)			
Complete HS Ed.	0.186	0.186	0.211	0.960	0.032	0.055
	(0.006)	(0.009)	(0.010)			
Some College Ed.	0.378	0.369	0.352	0.487	0.055	0.291
	(0.008)	(0.011)	(0.011)			
Complete College Ed.	0.165	0.148	0.151	0.120	0.183	0.847
	(0.006)	(0.008)	(0.008)			
Response time (hours)	0.052	0.045	0.052	0.271	0.915	0.395
	(0.004)	(0.005)	(0.005)			
Overestimate homicide	0.272	0.290	0.306	0.156	0.010	0.306
	(0.007)	(0.011)	(0.011)			
WTP homicide	137.870	144.025	136.316	0.072	0.651	0.052
	(1.980)	(2.784)	(2.815)			
WTP robbery	130.682	138.148	132.629	0.029	0.566	0.160
	(1.967)	(2.791)	(2.764)			
WTP theft	119.662	127.521	121.993	0.019	0.483	0.152
	(1.921)	(2.735)	(2.715)			
WTP total	388.214	409.693	390.938	0.025	0.776	0.090
	(5.511)	(7.825)	(7.834)			
Observations	3639	1825	1824			

Notes: Table shows descriptive statistics (mean and standard deviation in parentheses) across covariates and some of the main outcomes in the full experimental group sample. For each variable, we compare the three main groups of the experimental sample and report p-values based on the difference across groups. News (a) refers to the sample of individuals exposed to a crime-related news prior to answering the survey while Data (B) corresponds to the group of individuals who were provided the information of the actual murder rate of their country. WTP variables use respondents willingness to pay for each group and type of crime activity.

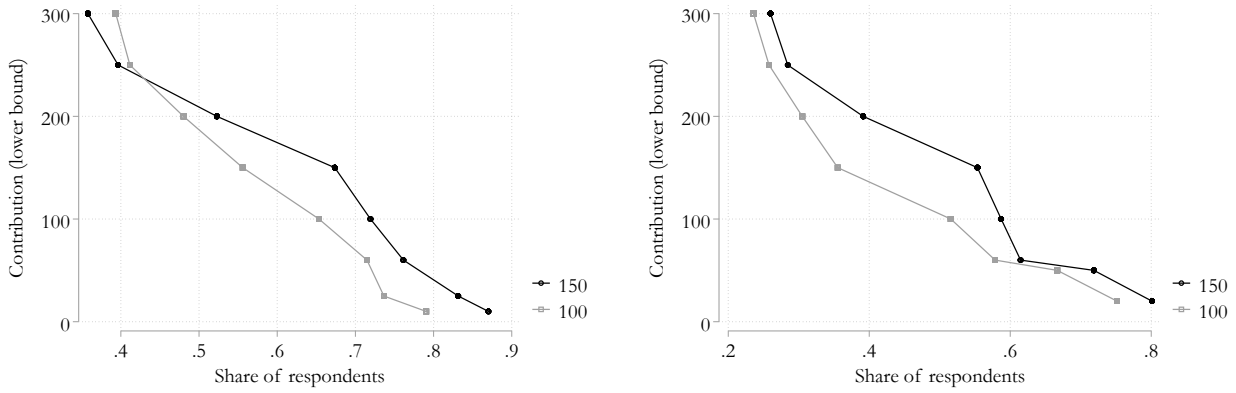
TABLE A2. Descriptive Statistics by Country: Control Group Sample

	Total	Argentina	Brazil	Chile	Colombia	Mexico	US
Crime reduction 30%	0.51	0.51	0.50	0.52	0.51	0.50	0.52
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Starting WTP 150	0.50	0.51	0.51	0.52	0.50	0.47	0.51
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Female	0.54	0.49	0.59	0.59	0.51	0.53	0.51
	(0.50)	(0.50)	(0.49)	(0.49)	(0.50)	(0.50)	(0.50)
Age	44.31	43.21	41.76	43.96	41.32	48.61	47.77
	(16.00)	(17.37)	(15.70)	(13.82)	(15.10)	(15.40)	(17.59)
Share < Primary ed	0.05	0.06	0.12	0.01	0.06	0.04	0.02
	(0.22)	(0.23)	(0.32)	(0.10)	(0.23)	(0.20)	(0.14)
Share < HS ed	0.57	0.63	0.69	0.47	0.67	0.50	0.44
	(0.50)	(0.48)	(0.46)	(0.50)	(0.47)	(0.50)	(0.50)
Share complete HS ed	0.19	0.23	0.08	0.20	0.15	0.12	0.39
	(0.39)	(0.42)	(0.27)	(0.40)	(0.36)	(0.33)	(0.49)
Share < college ed	0.38	0.32	0.20	0.52	0.28	0.46	0.53
	(0.49)	(0.47)	(0.40)	(0.50)	(0.45)	(0.50)	(0.50)
Share complete college ed	0.16	0.15	0.09	0.28	0.09	0.08	0.34
	(0.37)	(0.36)	(0.28)	(0.45)	(0.29)	(0.28)	(0.47)
Response time (hours)	2.38	2.27	2.51	2.28	2.16	2.27	2.88
	(10.45)	(9.57)	(12.91)	(9.81)	(8.51)	(10.01)	(11.52)
Observations	3,639	561	645	650	656	641	486

Notes: Table shows the mean and standard deviation (in parentheses) of a set of variables across countries in the control group sample. The first group of variables show the proportion of the sample considered on each type of questionnaire. The second group include a set of dummy variables we use as controls in the main analysis. Finally, we report the number of observations on each country.

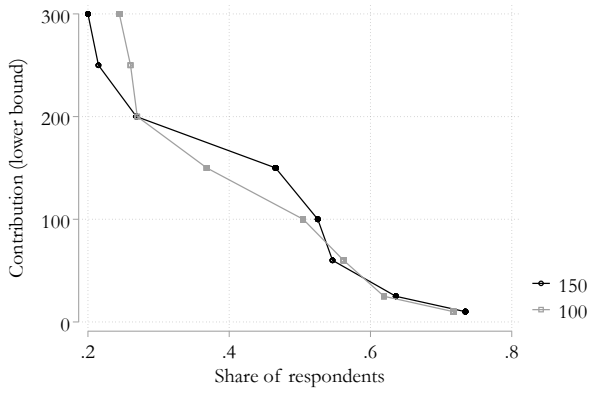
A1 WTP Results

Figure A1. Willingness to pay to reduce robbery by survey's starting value across countries

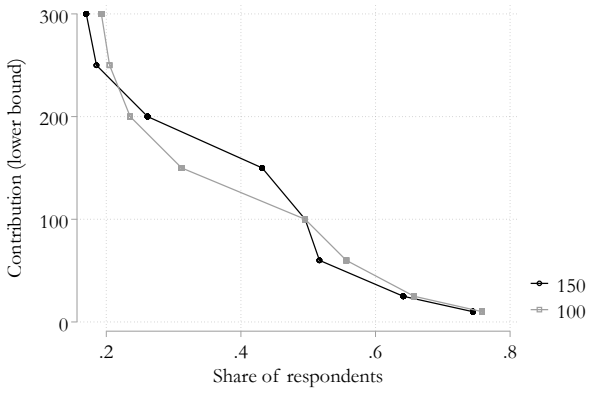


(a) Argentina

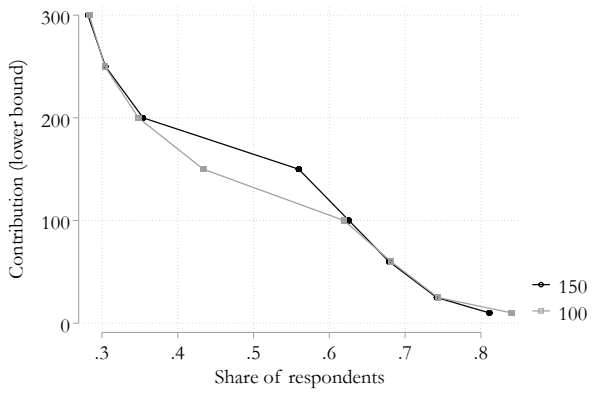
(b) Brazil



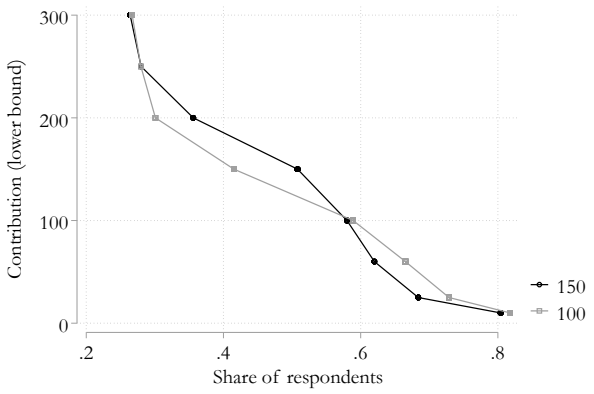
(c) Chile



(d) Colombia



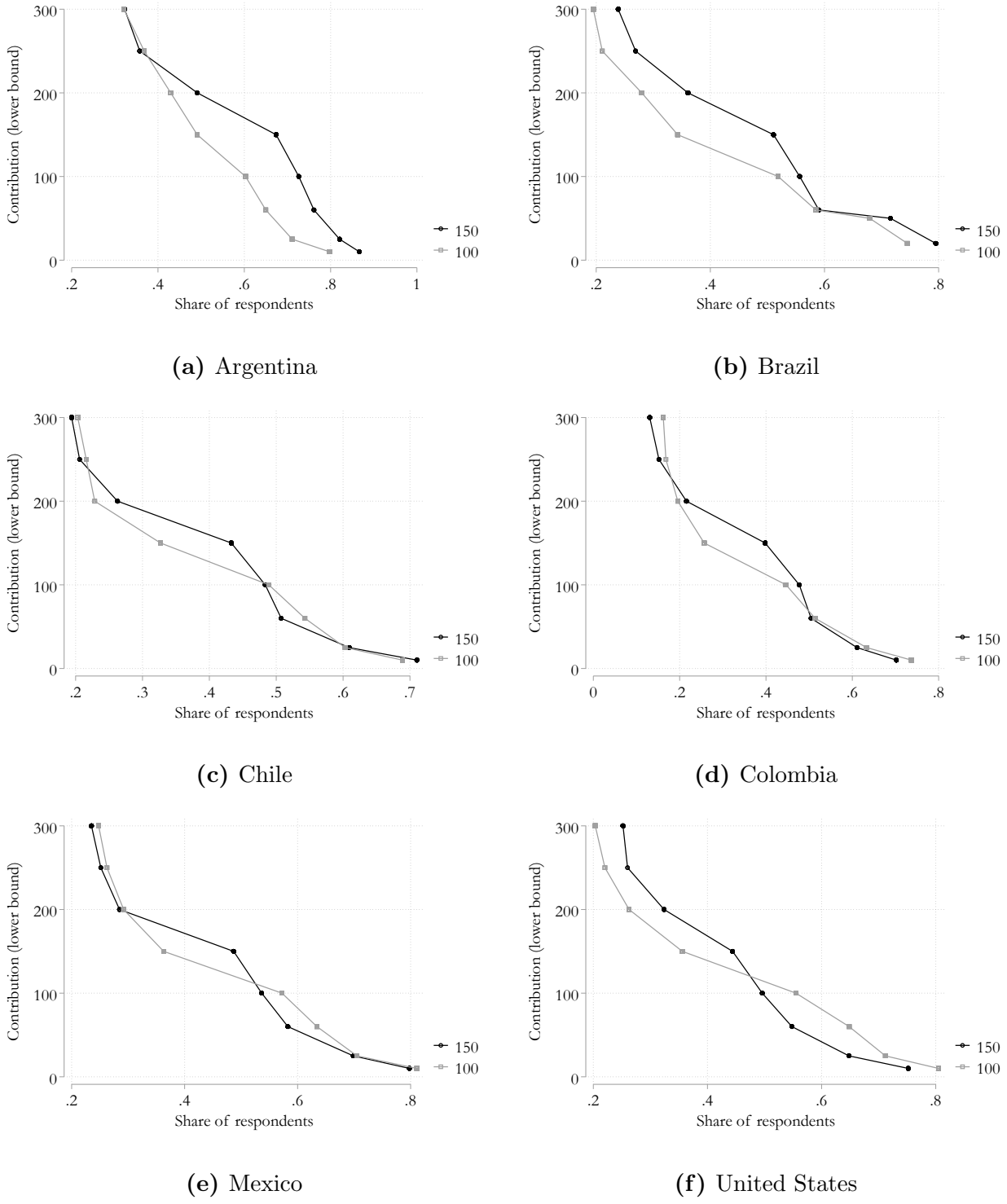
(e) Mexico



(f) United States

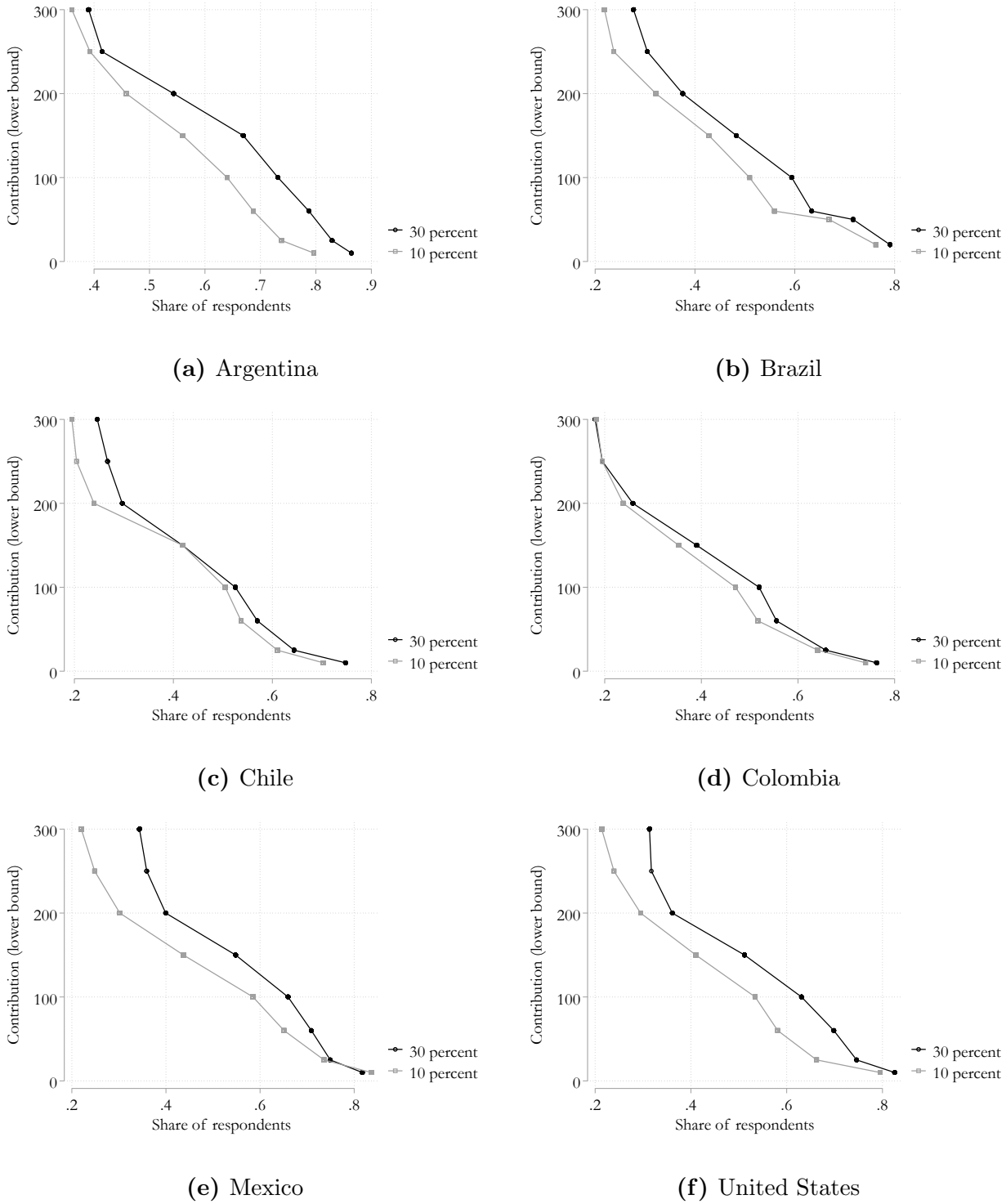
Note: Each figure shows the proportion of respondents by the amount they would be willing to pay to reduce armed robbery using the control group sample of respondents. Black, and gray lines represent responses associated with the survey's starting value for each sample of respondents. Individuals were asked "Would you be willing to pay "X" amount to reduce crime "C" by "P" percent?" We plot the share of respondent that affirmatively answered the amount indicated in the vertical axis by pooling together questions about crime reduction of 10 and 30 percent.

Figure A2. Willingness to pay to reduce theft by survey's starting value across countries



Note: Each figure shows the proportion of respondents by the amount they would be willing to pay to reduce theft using the control group sample of respondents. Black, and gray lines represent responses associated with the survey's starting value for each sample of respondents. Individuals were asked "Would you be willing to pay "X" amount to reduce crime "C" by "P" percent?" We plot the share of respondent that affirmatively answered the amount indicated in the vertical axis by pooling together questions about crime reduction of 10 and 30 percent.

Figure A3. Willingness to pay to reduce robbery by percentage of crime reduction across countries



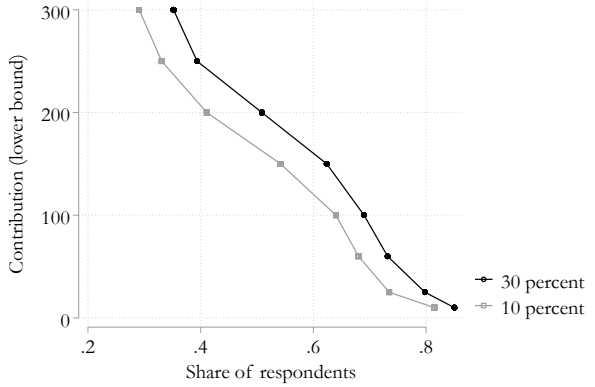
(a) Argentina **(b)** Brazil

(c) Chile **(d)** Colombia

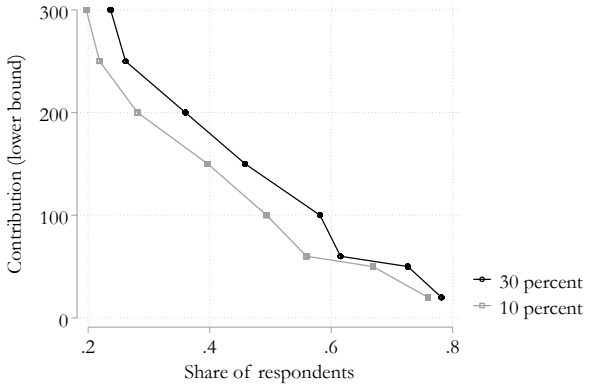
(e) Mexico **(f)** United States

Note: Each figure shows the proportion of respondents by the amount they would be willing to pay to reduce armed robbery using the control group sample of respondents. Black, and gray lines represent responses associated with the amount of the reduction proposed to each sample of respondents. Individuals were asked "Would you be willing to pay "X" amount to reduce crime "C" by "P" percent?" We plot the share of respondent that affirmatively answered the amount indicated in the vertical axis.

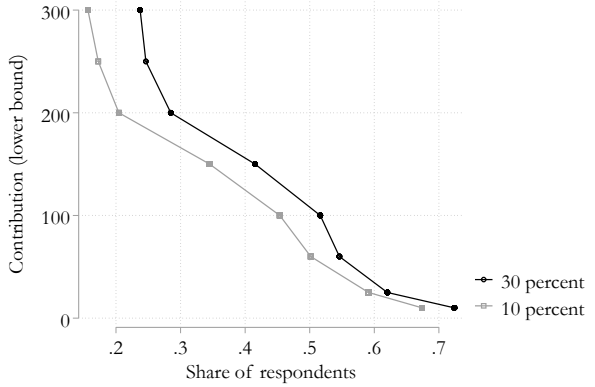
Figure A4. Willingness to pay to reduce theft by percentage of crime reduction across countries



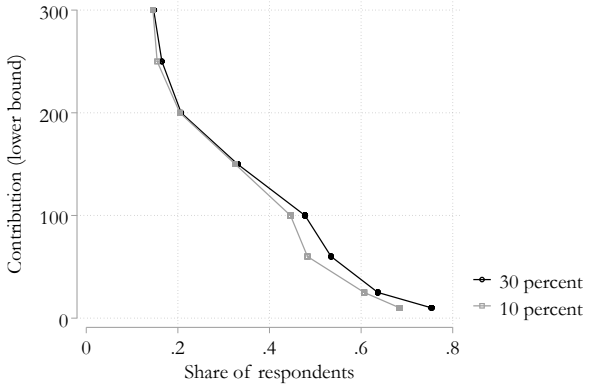
(a) Argentina



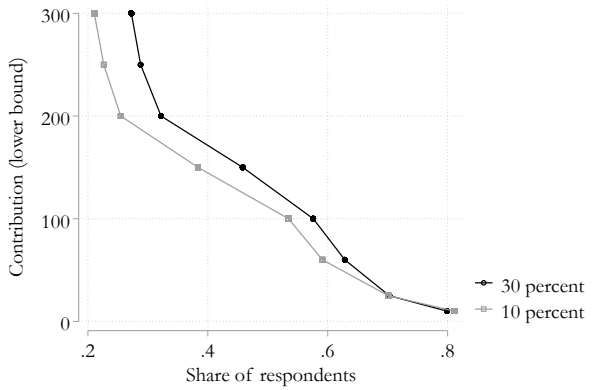
(b) Brazil



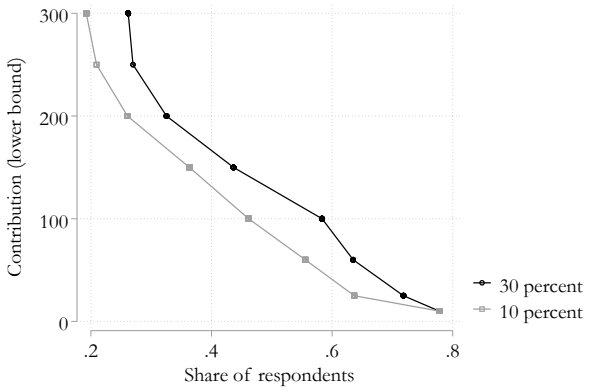
(c) Chile



(d) Colombia



(e) Mexico



(f) United States

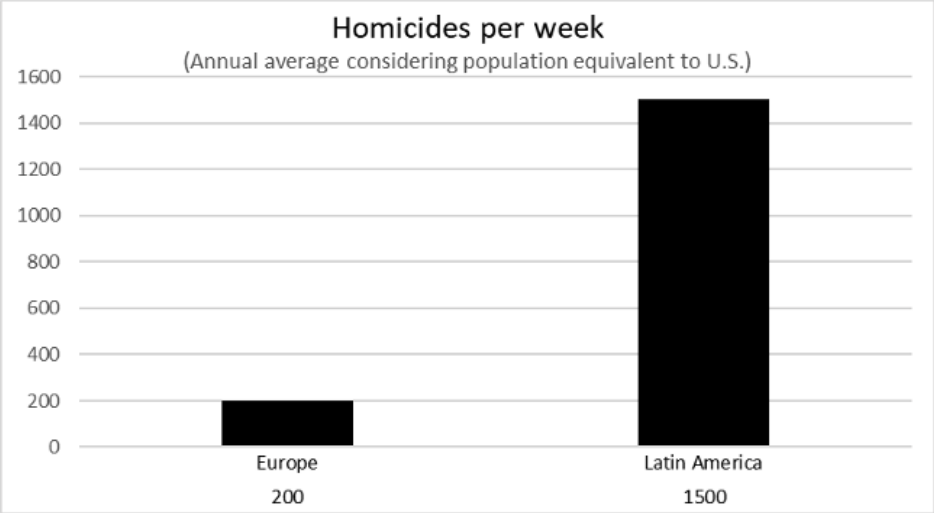
Note: Each figure shows the proportion of respondents by the amount they would be willing to pay to reduce theft using the control group sample of respondents. Black, and gray lines represent responses associated with the amount of the reduction proposed to each sample of respondents. Individuals were asked "Would you be willing to pay "X" amount to reduce crime "C" by "P" percent?" We plot the share of respondent that affirmatively answered the amount indicated in the vertical axis.

Figure A5. Estimate of Homicide Rate

To compare levels of crime between countries, the total number of crimes must be analyzed considering equivalent population sizes. In this question, we'd like to know your estimate of the number of homicides that occur in the U.S. every week.

Consider the following information, which was calculated using UNODC (United Nations Office on Drugs and Crime) Intentional Homicide Victims Data.

Did you know that, given the number of actual homicides that occur in each region, if the population of Europe and Latin America were equivalent to that of the U.S., the average number of homicides per week would be:



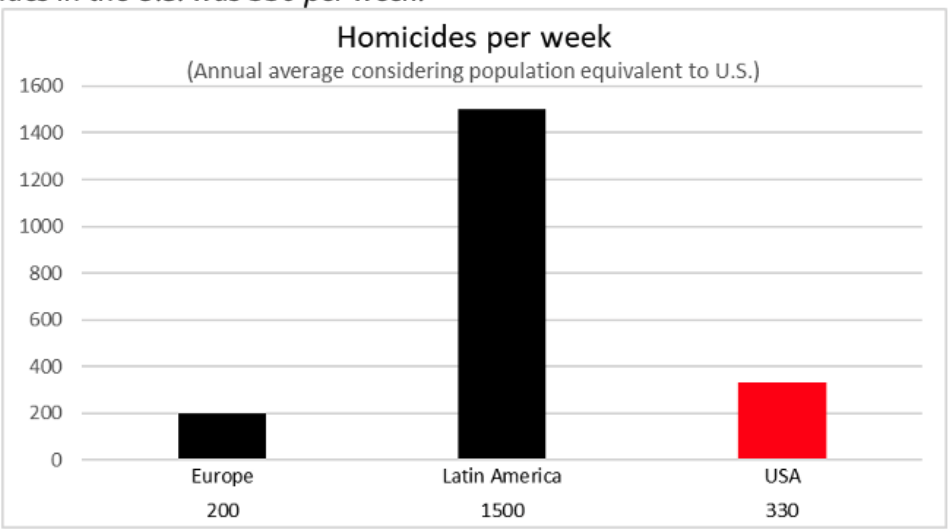
[Programming note: Place the following note as a footnote at the bottom of the page]
Note: (1) Countries considered in the simple: Lat.Am.: 21; Europe: 44 (2) Calculation based on a population equivalent to that of the U.S. (3) UNODC, Intentional Homicide Victims Data.

HREST. Considering this information, how many homicides per week do you think happen in the U.S. now?	

Figure A6. Treatment Information: Homicide Rate

CUESTIONARIO A & B (Treatment 2 – 25% & 25% of sample)
[Apply to 50% of the sample: all that already received treatment 1, plus 25% from the rest of the sample]

Did you know that, according to data for the year 2016, the average number of homicides in the U.S. was 330 per week?



[Programming note: Place the following note as a footnote at the bottom of the page]
Note: (1) Countries considered in the simple: Lat.Am.: 21; Europe: 44 (2) Calculation based on a population equivalent to that of the U.S. (3) UNODC, Intentional Homicide Victims Data.

Figure A7. News Treatment

QUESTIONNAIRE A (Treatment 1 – 25% of sample)
[Apply randomly to 25% of the sample]

Now, we will ask you to read this news article published in 2014, about a crime that occurred in the center of New York City five years ago.

Please read the text carefully. We will show the article for at least 15 seconds to give you enough time to read it.
[Programming note: show for at least 15 seconds**]**

Murder Downtown

New York City, April 2, 2014. – Last Monday night a 30-year-old woman lost her life after being hit by two gun shots during an assault. According to witnesses, the victim, who was leaving the building where she worked as a secretary, resisted an attacker who tried to steal her cell phone.
Following the robbery, the attacker shot the victim twice in the head before fleeing the scene. Police personnel reported that the victim died immediately at the scene.

The victim was the mother of two children aged 10 and 12. Police are gathering information to identify the offender.