

DOI: 10.53116/pgafnr.2022.2.4

# Why Mexicans (Dis)Obey the Law

## Social Norms, Legal Punishment and Pluralistic Ignorance

Rebeca Pérez León\* 

\* Assistant Professor, Instituto Tecnológico de Estudios Superiores de Monterrey Campus Querétaro, Mexico, Department of Humanities, e-mail: [drpoleon@gmail.com](mailto:drpoleon@gmail.com)

**Abstract:** This paper presents the results of an experimental research project on the causes of Mexicans' law-abiding and non-abiding behaviour. Firstly, it explains the theories tested, namely, deterrence and normative theory of law-abidance, and defines the concepts measured. Regarding deterrence theory, the causal efficacy of knowledge of legal punishment was measured and of normative theory that of social and personal norms. Second, it describes how these concepts were operationalised and how the two-stage experimental survey was conducted. Finally, the paper outlines the main results. The statistical analyses show that neither social norms explain unlawful behaviour nor knowledge of legal punishment influence law-abiding behaviour among Mexicans in specific situations. However, the analysis did show a statistically significant disagreement between Mexicans' behaviour and normative beliefs, which reveals a case of pluralistic ignorance whereby Mexicans behave illegally and believe others approve of illegal behaviour, but they personally disapprove of it. These results, however, would have to be confirmed in a study with a representative sample to be conclusive.

**Keywords:** deterrence theory, normative theory, legal sanctions, social norms, Mexicans' law-abiding behaviour

### 1. Introduction

There is vast evidence of the high disregard for the law in Mexico. From 2012 to 2018 Mexico plummeted 33 places in the Corruption Perception Index (CPI) resulting from numerous widely publicised cases of corruption among civil servants and politicians at all levels of government but especially at the federal level. As is well known, Mexico hosts some of the most powerful drug trafficking organisations in the world recruiting men and women of all social strata, and bribing police and military officials of all ranks. But unlawful behaviour is not exclusive to law enforcement and government officials and criminal organisations. Disregard for the law is also common among citizens illustrated by an extremely successful informal economy that overlooks labour rights and tax obligations, and by the fact that “pettier crimes such as theft on the street or

pickpocketing on public transportation are some of the most reported occurrences in Mexico, followed by extortion and fraud cases” (Statista Research Department, 2022). Yet disregard for the law is not a single, simple or unitary phenomenon. It has a myriad of manifestations, and each manifestation is brought about by multiple causes. Historical and sociological studies find the causes of Mexicans’ unlawful behaviour in Mexico’s political history and in the population’s precarious socio-economic conditions (Almond & Verba, 1989; Adler de Lomnitz, 1993; González Casanova, 1981; Fix Fierro et al., 2017). Legal studies highlight rather the gaps in the law (Camacho & García, 2020). And there are countless surveys that measure, categorise and disaggregate criminal activity in Mexico (ENCUP 2001, 2003, 2005, 2008, 2012; Amparo Casar, 2015). There is growing attention, however, to the causal efficacy of individuals’ normative and empirical expectations of others on legal behaviour (Girola, 2011; Morris, 2011; Sarsfield, 2012; Ajzenman, 2021), and the extent to which considerations about punishment play a role in individuals’ legal compliance. The investigation, whose key outcomes I hereby present, contributes to the gathering of evidence of the causal efficacy – or lack thereof – of these latter factors using an experimental methodological approach.

The investigation was conducted in 2021 with participants from Mexico City, and tests deterrence and normative theories of law-abidance using survey experiments. The project was guided by two interrelated questions, namely, ‘does knowledge of the legal punishments associated with particular legal breaches incline Mexicans to obey the law?’ and ‘do social norms of unlawful behaviour influence Mexicans’ unlawful behaviour?’. The former question looks at a possible cause of Mexicans’ law-abiding behaviour and draws its explanatory variable from deterrence theories, and the aim of the second question is to test whether the key variables of normative theories can explain unlawful behaviour. Generally speaking, deterrence theories maintain that individuals’ law-abiding and non-abiding behaviour result from considerations of the legal punishment associated with breaking the law. According to this theory, the more widely known, severe, swift and certain legal punishments are, the more effective the law will be in deterring individuals from breaking the law. Normative theories, on the other hand, state that social and personal norms of respect for the law condition individuals to follow the law. These two theories do not necessarily exclude one another as their respective variables could play a role in individuals’ inclination to follow or not follow the law.

The statistical analyses of the data did not provide evidence to support that considerations of legal punishment condition Mexicans’ legal behaviour nor did it provide evidence to show the existence of social norms of legal disobedience. However, they do show a statistically significant disagreement between Mexicans’ behaviour and normative beliefs that reveals a case of pluralistic ignorance whereby Mexicans behave illegally and believe others approve of illegal behaviour, but they personally disapprove of it. It would be necessary, however, to conduct the experimental design in a larger study with a representative sample in order to draw conclusive results.

The paper is divided into five sections. The first section briefly describes the main tenets of deterrence and normative theories. The second section identifies the key concepts to be measured, explains how these concepts were operationalised and how the experimental survey was designed and conducted. The third and fourth sections summarise the

main results and offer some interpretations of the results. The fifth and last section concludes the article.

## 2. Deterrence theory and normative theory of law-abidance

Deterrence theory is a crime prevention theory originally stemming from criminology. It presupposes a utilitarian concept of human beings and their rationality according to which “individuals make decisions based on what will garner them pleasure [or] pain” (Beccaria, 1986, cited in Tomlinson, 2016, p. 33). From this perspective, the rationality of human behaviour is determined by whether a particular conduct is experienced positively or negatively, or brings about consequences which are pleasurable or not. Pleasure and pain are not understood only in a physical or corporeal sense. Rather, these sentiments involve also symbolic and immaterial valuables such as praise or condemnation, sense of belonging or rejection, etc. Deterrence theory maintains that the most effective mechanism to prevent individuals from engaging in certain behaviours is to threaten them with the possibility of experiencing painful or unpleasant experiences as a penalty for engaging in those behaviours. In other words, deterrence theory advances the view that the best way to encourage individuals to avoid engaging in certain behaviours is to criminalise said behaviours.

For the threat to be effective though, individuals have to regard the penalty associated as a painful experience or as severe enough for them to want to avoid it. Moreover, individuals must know what penalty will follow in each case, believe that it will follow as a consequence for engaging in those behaviours, and that it will follow without undue delay. Deterrence theory is thus “grounded in individuals’ perceptions” (Tomlinson, 2016, p. 33) about the “certainty, celerity [...] severity” (Tomlinson, 2016, p. 34) and knowledge of penalties. Thus, authorities have to ensure that individuals have the relevant perceptions and knowledge, and for that they need effective communication mechanisms and socialisation agencies that reach the target population. The process of creating the relevant perceptions and knowledge is not straightforward, for numerous factors “such as age, gender, impulsivity, mental illness, anti-social personality disorder, etc.” (Ellis et al., 2009, cited in Tomlinson, 2016, p. 34) would have to be factored in for the authorities’ message to produce the desired results. Once the message about the penalties associated with engaging in certain behaviours is relayed to the target group, it is expected that individuals will make rational choices based on the information received, which, according to the concept of rationality of deterrence theory, should mean avoiding engaging in criminalised behaviours.

Now, in contrast to deterrence theories that view laws as the “chief means of regulating social relations [...] through the threat of punishment” (Barrett & Gaus, 2020, p. 204), normative theories of law-abidance discard the idea of law as something that opposes and supplants common norms and as the sole effective tool of behavioural change in a political community. Instead, normative theories regard laws and law-abiding behaviour as dependent on the social norms prevalent in the society under consideration and on individuals’ personal convictions (cf. Barrett & Gaus, 2020, p. 208–209). Thus, law-abiding behaviour is more prevalent when laws are compatible with common social norms

and the personal convictions of the members of a society. It is this compatibility that is likely to create social norms of legal obedience. At the opposite end of the spectrum, laws that are incompatible with common social norms are likely to be resisted thereby creating a social behavioural pattern of unlawful behaviour (cf. Stuntz, 2000; Kahan, 2000).

According to Barret and Gaus, “in cases where there is no social norm of legal obedience – either because there exists no norm relating to legal obedience or because a norm of legal disobedience is present – laws tend not to be followed, even in the presence of moral convictions that they ought to be” (Barrett & Gaus, 2020, p. 212). Social norms either of legal obedience or legal disobedience tend to trump personal convictions. If, for instance, an individual holds the belief that laws ought to be followed but witnesses people around him/her continuously and systematically breaking or overlooking the law, this individual is likely to behave in accordance with the collective behaviour he/she witnesses rather than with his/her personal moral convictions. This points toward a crucial element about the view of normative theories of individuals’ behaviour and their rationality, namely, “the main variable affecting behaviour is not what one personally likes or thinks one should do, but rather one’s belief about what ‘society’ approves of” (Bicchieri, 2017, p. 10). Normative theories, thus, see individuals’ behaviour as fundamentally social.

Not every pattern of collective behaviour is a social norm though, as Cristina Bicchieri’s typology of patterns of collective behaviour makes clear. Most people tend to use coats in winter, but their behaviour is not a social norm because wearing coats does not “depen[d] on the expectation that others conform” (Bicchieri, 2006, p. 22) or on “the belief that they expect me to conform” (Bicchieri, 2006, p. 22). A social norm exists when the preference of behaviour is caused by our belief that others engage in that behaviour and our belief that others expect us to engage in that behaviour: “A social norm exists when a sufficient number of individuals have the ‘normative expectation’ that others believe one ought to follow the law, and the ‘empirical expectation’ that others do in fact follow the law” (Barrett & Gaus, 2020, p. 212), and when these expectations are causing the choice of behaviour.

Social norms, thus, are maintained because individuals believe others follow the norm and because individuals believe the majority expect others to follow the norm, and they act upon these beliefs. These beliefs, however, might be mistaken, which gives rise to a phenomenon termed ‘pluralistic ignorance’. Pluralistic ignorance happens when individuals hold the aforementioned beliefs while ignoring that “it is not true that all members [...] believe one ought to follow N [the norm]. In fact, the majority of individuals dislike N and do not think one ought to follow it” (Bicchieri, 2017, p. 42). Since they believe the majority hold this mistaken belief too, they deliberately avoid openly revealing their true normative beliefs for fear of being at the receiving end of punishments of various sorts or because they seek to obtain the social benefits of behaving as others think one should behave such as “obtain[ing] approval or avoid[ing] disapproval” (Barrett & Gaus, 2020, p. 212) or some other symbolic or non-symbolic utility. Moreover, individuals might see others’ “expectations as legitimate [...] as grounding an obligation to comply” (Barrett & Gaus, 2020, p. 213). These reasons are powerful enough for people to comply with what they believe others believe and do, but, in some cases, this compliance contributes to the maintenance of socially damaging social norms.

### **3. Operationalisation of concepts and experimental survey design**

The first research question, ‘does knowledge of legal sanctions associated with particular legal breaches incline Mexicans to obey the law?’, looks at the causal efficiency of one of the explanatory concepts of deterrence theory on legal behaviour, that is, knowledge of legal sanctions. Additionally, the correlation – although not the causality – of certainty of legal punishment and choice of behaviour was tested. Celerity and severity of legal sanctions were left out. Celerity was left out because it is in a sense subsumed under individuals’ perception of the certainty of punishment, and because it requires more familiarity with legal processes than the average person is likely to have. Severity was not included because it presupposes knowledge of legal sanctions, a presupposition not necessarily warranted. The concept of knowledge of legal sanctions does not need to be operationalised. Sanctions were communicated to participants in simple and plain language in order to ensure that they were aware of them. Certainty of punishment was operationalised in terms of perceptions of the probability of receiving a legal sanction for specific legal offences. It was measured by asking participants about their perception of the likelihood of being punished if caught committing specific criminalised behaviours, where they had to choose between four options: highly likely, likely, not very likely, unlikely.

The second research question, ‘do social norms of unlawful behaviour influence Mexicans’ unlawful behaviour?’, looks at the influence of social norms on unlawful behaviour. This concept also needs operationalisation, but Cristina Bicchieri’s concept of social norms has the advantage of being easy to operationalise. Bicchieri defines social norms as patterns of collective behaviour where the preference for behaviour depends on empirical and normative social expectations. Social expectations generally are beliefs or future predictions about others. Empirical social expectations in particular are beliefs about how others will behave in the future, and normative social expectations are beliefs about what others approve of, and will continue to approve of in the future. Personal norms in turn are beliefs about what individuals personally approve of regardless of whether others agree or disagree with them (cf. Bicchieri, 2017, pp. 11ff, 18ff). In the first instance, measuring social norms requires gathering information about empirical and normative social expectations among participants. For there to be social norms though, there need not only be a majority consensus of the relevant expectations about others. Rather, preference for a particular behaviour must be caused by this consensus, that is, compliance must come as a result of the relevant social expectations. Thus, behaviour has to be measured when the relevant expectations are and are not present and see whether there are significant differences in behaviour.

Following Cristina Bicchieri’s standard measurement of social norms (cf. Bicchieri, 2017, p. 50ff; Bicchieri et al., 2014) I designed a two-staged experimental survey, the first of which aimed at finding out consensus (or lack thereof) of empirical and normative social expectations, and the second stage was intended to determine whether these expectations were causing unlawful behaviour. Since the research also aims at determining whether considerations about punishment influence Mexicans’ legal behaviour, the survey

of the first stage included a question about the perception of the likelihood of being punished if caught committing a legal offence, and the second stage also put to the test the causal efficacy of knowledge of legal sanctions on law-abiding behaviour. Causality implies not only that one phenomenon occurs after another, but rather it implies that, all things remaining equal, if the first phenomenon had not occurred, the second would not have occurred either. One way of measuring causality in survey experiments, as Bicchieri suggests, is to manipulate variables (Bicchieri, 2017, p. 27), for example, by giving information to some participants and not to others and evaluating whether their behaviour or choices change. If it does not change, then the independent variable under consideration is not having any influence, but if it does, then this would show that the independent variable is influencing behaviour.

After revising the data of the National Institute of Statistics and Geography of Mexico for Mexico City, four common offences were selected: bribing police officers; putting up food stands in the street without legal permission; not registering small businesses with the tax office; and urinating in the street. For the first stage, I designed a questionnaire that presents participants with four common situations where a fictional character faces the dilemma of whether to follow the law or commit one of the aforementioned common offences. For each situation, participants are asked what they believe others in Mexico City would do, what they believe others in Mexico City believe should be done, and what they themselves believe should be done. The first and second questions gather information about participants' empirical and normative social expectations, respectively. Since there is a possibility that participants' do not reflect carefully about the answers to these questions, each of these two questions was followed by a question where participants are asked to guess what the majority of participants in the study selected in the previous question, and were offered a monetary incentive for each correct guess. Finally, the third question inquires about their personal norms. For all questions, participants had four options, two of which described lawful behaviours and the rest described unlawful behaviours. This first questionnaire also included a chart listing the four relevant legal offences where participants had to choose the likelihood of being punished in each case from four options: highly likely, likely, not very likely and unlikely. Additionally, in this first questionnaire participants also had to answer questions about their age, gender, education level, and where they live.

For the second stage I designed three questionnaires which again presented participants with the same four situations described in the questionnaire of stage one, and in each case participants were asked to choose the course of action the fictional character would take. Participants had to choose from four options, two of which described lawful behaviours and the other two described unlawful behaviours. The questionnaires though were not exactly the same. One questionnaire added information about the legal sanctions corresponding to the legal breaches after describing the situation. A second questionnaire added false information about empirical and normative social expectations of the majority of participants of a previous study – a deception of which participants were informed after the study. The third questionnaire did not have additional information and was used with the control group. The responses of the questionnaires were compared in order to find out whether there were significant differences between them.

It should be noted that in the questionnaires used in the second stage participants are asked what they think the fictional character will do instead of asking participants what they themselves would do. I decided to ask indirect rather than direct questions because of the possibility that participants might not answer truthfully, namely, because of social desirability bias. This kind of error happens when asking sensitive questions to participants, such as whether they follow the law. In these situations “participants may provide survey workers with what they feel is a socially desirable answer, rather than with the answer that reflects their true attitude” (Bicchieri, 2017, p. 56). Asking indirect questions can provide a sort of solution to this problem, for “most individuals are subject to what is known as a ‘false consensus effect’ in that, when not aware of dispositional or person-specific information, they infer that a decision maker would behave as [...] they themselves would when in a particular situation” (Bicchieri, 2014, p. 11). Surely, asking indirect questions also creates an error, but the responses to these questions can still “teach us something about how the respondent would react” (Bicchieri, 2014, p. 11).

A random sample of thirty one adult Mexicans living in Mexico City at the time of the study was selected for the study. Given that it was an exploratory research project, the sample was small and not representative of the Mexican population although it did portray the characteristics of the population in terms of gender (51.6% identified themselves as women and 48.4% did so as men), and the ranges of age were similar to the Mexican population (25.8% were from 18 to 27 years old, 19.4% were from 28 to 37, 29% were from 28 to 47, 9.7% were from 48 to 57, 6.5% from 58 to 67 and 9.7% were from 68 to 77 years old). All participants answered the questionnaire of the first stage, and for the second stage participants were randomly selected to answer one of the three questionnaires.

The research and all materials were evaluated by the Ethics of Research Board at the Central European University in Vienna, and approved in August 2021. All participants received and signed a consent form before starting the experimental survey, and were duly informed of the false information given in one of the three questionnaires used in the second stage and of the reasons for using false information.

## 4. Results

As said above, one of the aims of the first stage was to find out whether there was a consensus or agreement of empirical and normative social expectations. These are shown in Table 1 below. With only one exception, the majority of participants believe most Mexicans in Mexico City would behave unlawfully and believe that most Mexicans in Mexico City believe others should behave unlawfully. In these cases, there is a consensus of both empirical and normative social expectations suggesting a high probability of the existence of social norms of legal disobedience.

In the first situation, a fictional character is driving on a lane exclusive for public transport, a police officer sees him and waves him to pull over. The police officer informs the fictional character that he will give him a ticket and take his car to the police car deposit. The character entertains the possibility of bribing the police officer so he can walk

away. When asked what they believe most Mexicans in Mexico City would do, 90.3% of participants believe most people would bribe the police officer, and only 9.7% believe they would not bribe the police officer. This clearly shows a consensus of empirical social expectations of unlawful behaviour when it comes to situations where individuals are faced with the possibility of bribing a police officer. Regarding normative expectations, 58.1% believe most Mexicans in Mexico City believe others should bribe the police officer, and 41.9% believe Mexicans believe others should not bribe police officers. Again, this shows an agreement of normative expectations of unlawful behaviour.

In the second situation, a fictional character works as a clerk in a hotel but every month struggles to make ends meet, so he/she entertains the possibility of selling food outside his/her house and is wondering whether to apply for a legal permit at the local council for that purpose. In this situation, 83.9% of participants believe that the majority of Mexicans in Mexico City would not apply for a legal permit, and 16.1% believe they would apply for a legal permit, which shows a consensus of empirical social expectation of unlawful behaviour. As to normative expectations, 41.9% believe most Mexicans in Mexico City believe others should not apply for a legal permit and 58.1% believe people believe others should apply for legal permission. Strictly speaking these percentages do not show an agreement of normative social expectation of unlawful behaviour, because the majority did not hold this social expectation. Yet the percentage of those who believe Mexicans in Mexico City approve of unlawful behaviour in this situation is still rather high.

In the third situation, a character just started his own business fixing computers, but he has not registered it with the tax office. A client asks him for a payment invoice, which the character cannot as of yet provide. 87.1% of participants believe the majority of Mexicans in Mexico City would not register their business with the tax office, and only 12.9% believe they would register it. These percentages show a consensus of empirical expectations of unlawful behaviour. Regarding normative expectations, 58.1% believe the majority of Mexicans in Mexico City believe the character should not register his business with the tax office and 41.9% believe people believe the character should register it. Again, these results show a consensus of normative expectations of unlawful behaviour.

Finally, in the last situation a man is walking down the street after attending a party. He badly needs to go to the toilet and there are no public toilets nearby and he is disinclined to go back to the party. He entertains the possibility of urinating in the street. When asked what the majority of people in Mexico City would do, 90.3% believe they would urinate in the street, and 9.7% believe they would not urinate in the street. This shows an agreement of empirical expectation of unlawful behaviour. As to normative expectations, 61.3% believe the majority of Mexicans in Mexico City believe the character should urinate in the street, and 38.7% believe people in Mexico City believe the character should not urinate in the street. Again, this shows a consensus of normative expectations of unlawful behaviour.



Table 1.  
Empirical and normative social expectations

	Bribing or not police officers		Applying for legal permit to put up a food stand in the street		Registering or not a business with the tax office		Urinating or not in the street	
	Empirical expect.	Normative expect.	Empirical expect.	Normative expect.	Empirical expect.	Normative expect.	Empirical expect.	Normative expect.
Unlawful behaviour	90.3%	58.1%	83.9%	41.9%	87.1%	58.1%	90.3%	61.3%
Lawful behaviour	9.7%	41.9%	16.1%	58.1%	12.9%	41.9%	9.7%	38.7%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Compiled by the author.

With one exception, participants’ responses to the questions of what they believe most Mexicans in Mexico City would do and believe others ought to do show a consensus of empirical and normative social expectations of unlawful behaviour. Thus, in the bribing situation, the business tax registration situation, and the urinating in the street situation, there is a high probability of there being social norms of unlawful behaviour, because social norms require a consensus of both empirical and normative expectations. In the food stand situation the majority does not hold a normative expectation of unlawful behaviour despite holding the empirical expectation of unlawful behaviour. Yet, the percentage of those who believe Mexicans in Mexico City approve of unlawful behaviour is high, so there is a possibility that there might be a social norm of unlawful behaviour in this situation, too.

The second stage aimed at determining the causes of lawful and unlawful behaviour in the relevant situations. In the questionnaire of stage one, I gathered participants’ data about age, gender and level of education. I first ran statistical tests to see whether these variables influenced participants’ responses, but the results of the tests do not support a dependence of behaviour on these variables. More concretely, I ran a point-biserial correlation to test whether age influences participants’ choice for lawful or unlawful behaviour for each of the situations. The correlation for the data revealed a significant relation between age and the choice of behaviour in the bribing situation,  $r = +0.479$ ,  $n = 31$ ,  $p < .01$ , two tails; no significant relation between age and the choice of behaviour in the urinating in the street situation,  $r = +0.193$ ,  $n = 31$ ,  $p > .05$ , two tails; no significant relation between age and applying for a permit to put up a food stand situation,  $r = +0.203$ ,  $n = 31$ ,  $p > .05$ , two tails; and no significant relation between age and the choice of behaviour in the business registration with the tax office situation,  $r = +0.267$ ,  $n = 31$ ,  $p > .05$ , two tails. These results are shown in Table 2.

Table 2.  
*Results of the point-biserial correlation between age and choice of behaviour*

	Bribing or not police officers	Applying or not for a legal permit to put up a food stand in the street	Registering businesses or not with the tax office	Urinating or not in the street
Age	0.479**	0.203	0.267	0.193

\* $p < 0.01$ , two tails

\*\* $p < 0.05$ , two tails

Source: Compiled by the author.

I also ran Fisher's Exact test to see whether gender and level of education influence the choice of behaviour. It was not possible to run the Chi-Square Test for Independence to evaluate the influence of gender and level of education on behaviour because the sample was too small and there were expected counts with less than five in all cases, which violates one of the assumptions of this test. In such cases, Fisher's Exact Test is used instead, which, similarly to the Chi-Square Test for Independence, tests the association or relationship between two nominal variables, but, unlike the Chi-Square Test for Independence, does not have the aforementioned assumption and can be used with very small samples. Below Tables 3 and 4 show the p values of Fisher's Exact Test for the relation between gender and choice of behaviour and level of education and choice of behaviour, respectively. In all cases, the p value is higher than 0.05 which suggests no association between the variables.

Table 3.  
*Fisher's Exact Test results for dependence of choice of behaviour on gender*

	Bribing or not police officers	Applying or not for a legal permit to put up a food stand in the street	Registering businesses or not with the tax office	Urinating or not in the street
Fisher's Exact Test Exact Sig. (2-sided)	0.394	0.394	0.333	0.654

Source: Compiled by the author.

Table 4.  
*Fisher's Exact Test results for dependence of choice of behaviour on level of education*

	Bribing or not police officers	Applying or not for a legal permit to put up a food stand in the street	Registering businesses or not with the tax office	Urinating or not in the street
Fisher's Exact Test Exact Sig. (2-sided)	0.889	0.172	0.879	1.00

Source: Compiled by the author.

After testing the influence of age, gender and level of education on choice of behaviour, I ran statistical analyses to test whether the main independent variables of this study, that is, knowledge of legal sanctions and empirical and normative expectations of unlawful behaviour influence lawful and unlawful behaviour, respectively. As described in the previous section, participants answered one of the three questionnaires. I gathered indirect information about what they would do in each situation and compared the results of the three questionnaires in order to see whether their choices differ significantly. In all cases I ran Fisher’s exact tests, but the statistical analysis showed no statistically significant dependence of lawful behaviour on considerations about legal sanctions or dependence of unlawful behaviour on empirical and normative social expectations. The crosstab of percentages is shown in Table 5 and the p values of Fisher’s exact tests are shown in Table 6 below.

Table 5.  
*Percentages of choice of behaviour by treatment group and situation*

	Bribing or not police officers		Applying or not for a legal permit to put up a food stand in the street		Registering businesses or not with the tax office		Urinating or not in the street	
	Unlawful behav.	Lawful behav.	Unlawful behav.	Lawful behav.	Unlawful behav.	Lawful behav.	Unlawful behav.	Lawful behav.
Not knowing legal sanctions and no information about social expectations (control group or group A)	70%	30%	80%	20%	90%	10%	90%	10%
Manipulated empirical and normative expectations (second treatment group or group B)	100%	0%	80%	20%	90%	10%	90%	10%
Knowing legal sanctions (first treatment group or group C)	72.7%	27.3%	72.7%	27.3%	72.7%	27.3%	63.6%	36.4%

Source: Compiled by the author.

Table 6.  
*Results of Fishers' Exact Test of survey experiment*

	Bribing or not police officers	Applying or not for a legal permit to put up a food stand in the street	Registering businesses or not with the tax office	Urinating or not in the street
Fisher-Freeman-Halton Exact Text Exact Sig. (2-sided)	.199	1.000	.578	.306

*Source:* Compiled by the author.

If we compare the percentages of participants who were informed that the majority of respondents in a previous study would take the lawful course of action and disapprove of unlawful behaviour with the percentages of participants who did not receive additional information in Table 5, the majority in both groups chose unlawful behaviours in all situations. This suggests that the additional information did not have any significant influence on their choice of behaviour and, thus, that there are no social norms of legal disobedience in the relevant situations. Even though most participants believe others break the law and approve of illegal behaviour in most situations, the statistical results of Fisher's Exact Test in Table 6 do not support the hypothesis that these beliefs cause unlawful behaviour among Mexicans in Mexico City. Admittedly, given the small sample of this study, these results can only indicate this possibility without being able to state a conclusive lack of causal relation.

Now, with respect to the independent variable of deterrence theory under consideration, in three out of four situations the percentages of people who chose an unlawful course of action and were informed of the legal sanctions corresponding to each offence are slightly lower than the percentages of the control group (participants who receive no additional information of any kind). This difference is not statistically significant as shown in Table 6, but it is worth noting, for in research with a larger sample these differences might turn out to be significant. As they are, in all cases and regardless of whether they knew of legal sanctions or not, the majority still chose the unlawful behaviour.

One possible reason as to why knowledge of legal sanctions does not nudge individuals towards behaving lawfully is that deterrence theory has been relentlessly tested and consistently found limited in its ability to significantly explain legal compliance and deter unlawful behaviour (cf. Barrett & Gaus, 2020, pp. 209–210; Tomlinson, 2016, pp. 33–38; Tyler, 2006, p. 22). Yet, I still decided to test the influence of knowledge of legal sanctions on legal behaviour because there are still too few empirical studies that put the theory to the test in the Mexican case even though numerous strategies to reduce criminal behaviour in Mexico generally and Mexico City in particular still rely on the explanations of deterrence theory. Although this study is not representative, it does corroborate the findings of larger studies that not only suggest the limited effectiveness of policies based on deterrence theory but also highlight the need to design different ones.

The results of the correlation between certainty of punishment and choice of behaviour provides further evidence of deterrence theory's limited ability to explain legal

compliance. It might be recalled that in the questionnaire used in the first stage, participants were asked about their perceptions of the likelihood of being punished if caught committing the relevant legal offences. The influence of their perception on their choice of behaviour was then tested using Fisher’s Exact Test, but the results support no significant influence. Table 7 contains the percentages of choice of behaviour by perception of degree of likelihood of being punished and Table 8 shows the results of Fisher’s Exact test.

Table 7.  
*Percentages of choice of behaviour in each situation by perception of degree of likelihood of legal punishment*

	Bribing or not police officers			Applying or not for a legal permit to put up a food stand in the street			Registering or businesses or not with the tax office			Urinating or not in the street		
	Unlaw. behav.	Law. Behav.	Total	Unlaw. behav.	Law. behav.	Total	Unlaw. behav.	Law. behav.	Total	Unlaw. behav.	Law. behav.	Total
Highly likely	9.7%	6.5%	16.2%	22.6%	9.7%	32.3%	19.4%	9.7%	29.1%	29%	9.7%	38.7%
Likely	12.9%	3.2%	16.1%	12.9%	9.7%	22.6%	16.1%	3.2%	19.3%	29%	6.5%	35.5%
Not very likely	51.6%	9.7%	61.3%	29%	3.2%	32.2%	45.2%	3.2%	48.4%	12.9%	3.2%	16.1%
Unlikely	6.5%	0%	6.5%	12.9%	0%	12.9%	3.2%	0%	3.2%	9.7%	0%	9.7%
<b>Total</b>	<b>80.6%</b>	<b>19.4%</b>	<b>100%</b>	<b>77.4%</b>	<b>22.6%</b>	<b>100%</b>	<b>83.9%</b>	<b>16.1%</b>	<b>100%</b>	<b>80.6%</b>	<b>19.4%</b>	<b>100%</b>

Source: Compiled by the author.

Table 8.  
*Results of Fisher’s Exact Test for association between choice of behaviour in each situation and perception of likelihood of punishment*

	Bribing or not police officers	Applying or not for a legal permit to put up a food stand in the street	Registering or businesses or not with the tax office	Urinating or not in the street
Fisher’s Exact Test Exact Sig. (2-sided)	0.710	0.280	0.322	1.00

Source: Compiled by the author.

Participants’ perception of the likelihood of being punished for bribing, not applying for legal permission to sell food in the street, and not registering a business with the tax office is significantly low, which could explain that a large number of participants in these cases chose an unlawful course of action. More specifically, of 67.8% of participants who believe it is unlikely or not very likely that they will be punished for bribing 58.1%

chose an unlawful course of action; of 51.6% of those who believe it is unlikely or not very likely that they will be punished for not registering a business with the tax office 48.4% chose unlawful behaviours; and of 45.1% of those who believe it is unlikely or not very likely that they will be punished for not having legal permission to sell food in the street 41.9% decided for unlawful behaviours. This pattern might suggest that it is more likely to commit a legal offence if you believe the risk of punishment is very low or non-existent, which would very much accord with the tenets of deterrence theory.

This interpretation, however, is challenged by the percentages of the urinating in the street situation and other tendencies in Table 7. In the urinating in the street situation, out of 74.2% of participants who believe it is highly likely or likely to be punished for committing this legal offence 58% would still urinate in the street. Out of 48.4% of those who believe it is highly likely or likely to be punished for not registering a business with the tax office, 35.5% would nonetheless not register a business with the tax office. And a similar tendency can be seen in the applying for legal permission to put up a food stand in the street situation, where, although 54.9% of participants believe it is highly likely or likely to be punished for not having legal permission to sell food in the street, 35.5% would sell food in the street without legal permission. Together with the higher p values shown in Table 8, the percentages described in the previous paragraph and in this paragraph suggest that people's perception of the likelihood of being punished does not rate high in their considerations about whether to commit a legal offence or not, for regardless of whether they believe it is highly likely, likely, not very likely or unlikely to be punished, the majority would still decide for an unlawful course of action. This conclusion disproves the explanations of deterrence theory.

Something worth noting is the contrast between the factual degree of certainty of punishment in Mexico and participants' perception of the likelihood of being punished. According to the results of the 2013 National Survey of Victimization and Perception of Public Security, of 33,090,263 crimes committed, 5.08% were reported, 0.49% were investigated and only 0.33% were punished (cited in Amparo Casar, 2015, p. 56). This means that 99.51% of crimes in Mexico are not investigated, and 99.7% are not punished. It would be safe to say that in Mexico people who commit legal offences generally get away with it. In contrast, Table 7 shows that only a minority of individuals are aware of this fact, for very few people believe it is unlikely that they will be punished for committing the relevant legal offences.

## 5. Pluralistic ignorance

An unexpected result was found when comparing participants' personal normative beliefs and their normative social expectations. More concretely, when participants were asked whether they personally approve of unlawful behaviour, the majority responded negatively although they believe others do approve of unlawful behaviour. In other words, most participants believe others approve of unlawful behaviour significantly more than they personally do. This shows an inaccurate perception about others' normative beliefs, which is likely to be caused by the belief that others do in fact break the law.

Clearly, if people witness constant legal offences in their environment either personally or vicariously, it is reasonable to believe that unlawful behaviour is approved of by others. However, in some situations this normative belief is false and generates the phenomenon of ‘pluralistic ignorance’.

‘Pluralistic ignorance’ is a “socio-psychological phenomenon that involves a systematic discrepancy between people’s private beliefs and public behaviour in certain contexts” (Bjerring et al., 2014, p. 2445). Bicchieri defines it as a “belief trap” (Bicchieri, 2017, p. 44) where perceived consensus of normative social expectations differs from objective consensus, for “each member of a group believes her personal normative beliefs and preferences are different from those of similarly situated others, even if public behaviour is identical” (Miller & McFarland, 1987, cited in Bicchieri, 2017, p. 42). Thus, a case of pluralistic ignorance occurs when:

- a) People hold the true belief that others engage in a particular behaviour, i.e. breaking the law, because they in fact engage in said behaviour, but
- b) also hold the false belief that others believe one ought to engage in the behaviour because, in fact,
- c) most people hold the belief that one ought not to engage in said behaviour.

In order to detect pluralistic ignorance, information about personal normative beliefs are gathered and compared to their second-order beliefs about others’ normative beliefs (normative social expectations). In all cases, comparisons between personal normative beliefs and normative social expectations show this kind of discrepancy as detailed in Table 9.

Table 9.  
*Percentages of normative social expectations and personal norms*

	Bribing or not police officers		Applying for legal permit or not to put up a food stand in the street		Registering or not businesses with the tax office		Urinating or not in the street	
	Normative Social Expectation	Personal Norm	Normative Social Expectation	Personal Norm	Normative Social Expectation	Personal Norm	Normative Social Expectation	Personal Norm
Unlawful behaviour	58.1%	29.0%	41.9%	29.0%	58.1%	25.8%	61.3%	32.3%
Lawful behaviour	41.9%	71.0%	58.1%	71.0%	41.9%	74.2%	38.7%	67.7%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Compiled by the author.

Table 9 shows clearly that in all cases the percentages of normative social expectations of unlawful behaviour are larger than the percentages of personal norms of unlawful behaviour and, concomitantly, the percentages of normative social expectations of lawful behaviour are smaller than the percentages of personal norms of lawful behaviour. In other words, in most situations a majority of participants believe others approve of unlawful behaviour but actually most participants disapprove of unlawful behaviour. Correspondingly, in most situations a majority of participants approve of lawful behaviour, but a smaller percentage believe others approve of lawful behaviour. For all situations, I ran related-samples McNemar test with a p value of 0.05, two-tailed, to see whether these differences were statistically significant and, as shown in Table 10, with one exception, they were significant.

Table 10.

*Results of related-samples McNemar test of differences between normative social expectations and personal norms*

	Bribing or not police officers	Applying for legal permit or not to put up a food stand in the street	Registering or not businesses with the tax office	Urinating or not in the street
Distribution of values across Normative Social Expectations and Personal Norms Exact Sig. (2-sided test)	.012	.344	.013	.022

*Source:* Compiled by the author.

These results suggest that, although Mexicans do engage in unlawful behaviour, they do not approve of it. In fact, most participants appear to prefer lawful courses of action, but they do not behave according to their own normative beliefs. Clearly, Mexicans feel that there are many situations where they have to compromise their personal normative beliefs and behave according to how they believe things are done. They might believe that going with the collective flow, as it were, is actually the most rational course of action in the sense that they use the least amount of resources while obtaining a maximum utility.

## 6. Conclusions

This article presents the results of an experimental research guided by two questions, namely, 'does knowledge of the legal punishments associated with particular legal breaches incline Mexicans to obey the law?' and 'do social norms of unlawful behaviour influence Mexicans' unlawful behaviour?'. The first question draws its independent variable from deterrence theory and the second question does so from normative theory of



law-abidance. The study conducted an experimental survey to a sample of 31 adult Mexicans living in Mexico City at the time of the study. The statistical tests, however, did not show that knowledge of legal sanctions inclines Mexicans to obey the law, nor the existence of social norms of unlawful behaviour. The statistical tests did show a sharp and statistically significant discrepancy between participants' legal behaviour, normative beliefs and personal beliefs, which suggests a case of pluralistic ignorance. These results would have to be confirmed in a larger study with a representative sample in order to be conclusive.

## References

- Adler de Lomnitz, L. (1993). *Cómo Sobreviven los Marginados*. Siglo XXI Editores.
- Ajzenman, N. (2021). The Power of Example: Corruption Spurs Corruption. *American Economic Journal: Applied Economics*, 13(2), 230–257. Online: <http://doi.org/10.1257/app.20180612>
- Almond, G. & Verba, S. (1989). *The Civic Culture. Political Attitudes and Democracy in Five Nations*. Sage Publications. Online: <http://doi.org/10.1515/9781400874569>
- Amparo Casar, M. (2015). *Mexico. Anatomía de la Corrupción*. CIDE/IMCO.
- Barrett, J. & Gaus, G. (2020). Laws, Norms, and Public Justification: The Limits of Law as an Instrument of Reform. In S. A. Langvatn, M. Kumm & W. Sadurski (Eds.), *Public Reason and Courts* (pp. 201–228). Cambridge University Press. Online: <http://doi.org/10.1017/9781108766579.009>
- Bicchieri, C. (2006). *The Grammar of Society. The Nature and Dynamics of Social Norms*. Cambridge University Press. Online: <http://doi.org/10.1017/CBO9780511616037>
- Bicchieri, C., Lindemans, J. W. & Jiang, T. (2014). A Structured Approach to a Diagnostic of Collective Practices. *Frontiers in Psychology*, 5(1418), 1–14. Online: <http://doi.org/10.3389/fpsyg.2014.01418>
- Bicchieri, C. (2017). *Norms in the Wild. How to Diagnose, Measure, and Change Social Norms*. Oxford University Press. Online: <http://doi.org/10.1093/acprof:oso/9780190622046.001.0001>
- Bjerring, J. C., Hansen, J. U. & Linding Pedersen, N. J. L. (2014). On the Rationality of Pluralistic Ignorance. *Synthese*, 191(11), 2445–2470. Online: <http://doi.org/10.1007/s11229-014-0434-1>
- Camacho Beltrán, E. & García González, F. (2020). El concepto de corrupción y el pacto constitucional mexicano. In J. A. Cruz Parceros (Eds.), *Los Derechos Sociales en México. Reflexiones sobre la Constitución de 1917* (pp. 389–433). Instituto de Estudios Constitucionales del Estado de Querétaro.
- ENCUP – Encuesta Nacional Sobre Cultura Política. Online: [www.encup.gob.mx/Encup/Encup](http://www.encup.gob.mx/Encup/Encup)
- Fix Fierro, H., Flores, J. I. & Valadés, D. (Eds.) (2017). *Los Mexicanos y su Constitución. Tercera Encuesta Nacional de Cultura Constitucional. Centenario de la Constitución de 1917*. IJ/UNAM. Online: <https://bit.ly/3FCohHs>
- Girola, L. (2011). La Cultura de la Transgresión. Anomías y Cultura del ‘Como si’ en la Sociedad Mexicana. *Estudios Sociológicos*, 29(85), 99–129. Online: <http://doi.org/10.24201/es.2011v29n85.131>
- González Casanova, P. (1981, September 1). La cultura política de México. *Nexos*. Online: [www.nexos.com.mx/?p=3914](http://www.nexos.com.mx/?p=3914)
- Kahan, D. M. (2000). Gentle Nudges vs Hard Shoves: Solving the Sticky Norms Problem. *The University of Chicago Law Review*, 67(3), 607–645. Online: <http://doi.org/10.2307/1600336>
- Morris, S. D. (2011). Mexico's Political Culture: The Unrule of Law and Corruption as a Form of Resistance. *Mexican Law Review*, 3(2), 327–342. Online: <https://bit.ly/3Y9JH5W>
- Resultados de la Quinta Encuesta Nacional sobre Cultura Política y Prácticas Ciudadanas (ENCUP). (2012). IJ/UNAM.
- Sarsfield, R. (2012). The Bribe Game: Microfoundations of Corruption in Mexico. *The Justice System Journal*, 33(2), 215–234. Online: <http://doi.org/10.1080/0098261X.2012.10768012>

- Stuntz, W. J. (2000). Self-Defeating Crimes. *Virginia Law Review*, 86(8), 1871–1899. Online: <http://doi.org/10.2307/1073832>
- Tomlinson, K. D. (2016). An Examination of Deterrence Theory: Where Do We Stand? *Federal Probation Journal*, 80(3), 33–38. Online: <https://bit.ly/3BlagLQ>
- Transparency International (2021). Corruption Perception Index. Online: [www.transparency.org/en/cpi/2021](http://www.transparency.org/en/cpi/2021)
- Tyler, T. R. (2006). *Why People Obey the Law*. Princeton University Press. Online: <http://doi.org/10.2307/j.ctv1j66769>