

Framed by the Law: Experimental Evidence for the Effects of the Salience of the Law on Preferences

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This Article takes an experimental approach to test whether the salience of the law as a system that governs an interaction affects people's preferences. I find that when the law is made salient in an interaction people's preferences are altered: they express more future-oriented preferences and donate less money to charity, as compared to when the law is not salient in an otherwise identical interaction. When the law is salient in an interaction people also prefer 'products' over experiences, but this gap is only marginally significant. The findings suggest that the framing of an interaction as legal tends to evoke cultural scripts and implicit rules of behavior ("common knowledge") that incorporate the shared assumptions in society about the law. In response, participants interpret the interaction as more rational and instrumental and express preferences accordingly.

INTRODUCTION

Does the law affect people's preferences? Various studies have focused on the ways in which the law affects people's behaviors. One rich body of literature has focused on legal incentives and documented the effects of punishment on behavior. Some studies have found that punishments tend to decrease the behavior that is being penalized. Yet, scholars disagree about the magnitude of the deterrent effects of punishments and the conditions under which they occur.¹ Another vast body of literature has focused on the effects of legal

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1 Philip J. Cook, *Research in Criminal Deterrence: Laying the Groundwork for the Second Decade*, 2 CRIME & JUST. 211, 211-268 (1980); JACK P. GIBBS, CRIME, PUNISHMENT AND DETERRENCE (1975); ASSEMB. BEHAV. & SOC. SCI. (U.S.), DETERRENCE AND INCAPACITATION: ESTIMATING THE EFFECTS OF CRIMINAL SANCTIONS ON CRIME RATES (Alfred Blumstein, Jacqueline Cohen & Daniel Nagin eds., 1978); Uri Gneezy & Aldo Rustichini, *Incentives, Punishment and Behavior*, in

norms on people's moral judgments and preferences. Scholars have shown that the law has symbolic or expressive effects on people. The law not only incentivizes people but also alters their normative judgments, by implying a social consensus that the illegal prohibited behaviors are morally wrong.²

This Article takes a different angle. Instead of focusing on the effects of specific laws on people's behaviors, moral judgments and preferences, it examines the general effects of the salience of the law (as a system that governs the interaction) on people's preferences. In other words, I explore the effects of the framing of the interaction as 'legal' on the preferences that people express.³ The project is therefore exploratory in its nature. I ask whether preferences are altered when the law is made salient in an interaction. I show that when the law is salient in an interaction people express more future-oriented preferences and donate less money to charity, as compared to when the law is less salient in an otherwise identical interaction. When the law is salient in an interaction people also prefer 'products' over experiences, but this gap is only marginally significant. In the first Part, I draw on theories in sociology and social psychology to develop an explanation for how the salience of the law could frame the interaction in a way that alters people's preferences. I then proceed to describe the research hypotheses and the experimental design. In the last two Parts, I present the results and discuss their implications.

ADVANCES IN BEHAVIORAL ECONOMICS 572 (Colin F. Camerer, George Loewenstein & Matthew Rabin eds., 2004).

- 2 Leonard Berkowitz & Nigel Walker, *Laws and Moral Judgments*, 30 *SOCIOMETRY* 410 (1967); Robert J. MacCoun, *Drugs and the Law: A Psychological Analysis of Drug Prohibition*, 113 *PSYCH. BULL.* 497 (1993); Mark C. Suchman, *On Beyond Interest: Rational, Normative and Cognitive Perspectives in the Social Scientific Study of Law*, 1997 *WIS. L. REV.* 475, 480-82, 486-90 (1997); Cass R. Sunstein, *Social Norms and Social Roles*, 96 *COLUM. L. REV.* 903 (1996); Cass R. Sunstein, *On the Expressive Function of Law*, 144 *U. PA. L. REV.* 2021 (1996); Oren BarGill & Chaim Fershtman, *Law and Preferences*, 20 *J. L. ECON. & ORG.* 331 (2004); Robert Cooter, *Expressive Law and Economics*, 27 *J. LEGAL STUD.* 585, 585-607 (1998); Catherine Albiston et al., *Laws, Norms and the Caretaker Penalty* (2012) (unpublished manuscript) (on file with author).
- 3 Note that the Article does not address the effects on people's actual preferences, but rather only the effects on the preferences they express in the interaction.

I. THEORETICAL BACKGROUND AND HYPOTHESES

To better understand why the salience of the law might affect the preferences people express, we should first understand how and why interactions are culturally framed.

Social interactions require coordinating with others under uncertainty.⁴ In interactions, people are frequently required to be able to anticipate how others are going to behave and to behave accordingly. Social psychologists, game theorists and sociologists have all shown that in order to coordinate and organize everyday interactions, people rely on a body of “common knowledge” that includes cultural scripts and implicit rules of behavior that they all share and can presume that everybody else shares.⁵ In fact, people do not necessarily have to believe that the common cultural scripts and implicit rules are the best or that they are always accurate, but rather only to understand that they are the rules that will lead to successful coordination. An example of such “common knowledge” would be stereotypes and cultural beliefs about race or gender that tend to be evoked when race or gender is salient in an interaction and to affect the expectations and behaviors of the people involved.⁶

The framing of everyday interactions assists people in interpreting them and in coordinating with others by evoking the “common knowledge.”⁷ The framing of interactions immediately and sometimes unconsciously evokes the relevant cultural scripts and implicit rules of behavior that incorporate the shared assumptions about what the interactions are and how people should behave. People respond to the framing of interactions by making the choices that correspond with the relevant cultural scripts and implicit rules.

What are the taken-for-granted cultural scripts and rules of behavior that are evoked when the law is salient in an interaction?

4 Marilyn B. Brewer, *On the Social Origins of Human Nature*, in *THE MESSAGE OF SOCIAL PSYCHOLOGY: PERSPECTIVES ON MIND IN SOCIETY* 54, 54-62 (Craig McGarty & S. Alexander Haslam eds., 1997); MICHAEL SUK-YOUNG CHWE, *RATIONAL RITUAL: CULTURE, COORDINATION, AND COMMON KNOWLEDGE* (2001).

5 *Id.*; ERVIN GOFFMAN, *THE PRESENTATION OF SELF IN EVERYDAY LIFE* (1959); ERVIN GOFFMAN, *INTERACTION RITUAL: ESSAYS ON FACE-TO-FACE BEHAVIOR* (1967); Sheldon Stryker & Kevin D. Vryan, *The Symbolic Interactionist Frame*, in *THE HANDBOOK OF SOCIAL PSYCHOLOGY* 3-28 (John DeLamater ed., 2003); PETER L. BERGER & THOMAS LUCKMANN, *THE SOCIAL CONSTRUCTION OF REALITY: A TREATISE IN THE SOCIOLOGY OF KNOWLEDGE* (1966).

6 CECILIA RIDGEWAY, *FRAMED BY GENDER* (2011).

7 ERVIN GOFFMAN, *FRAME ANALYSIS: AN ESSAY ON THE ORGANIZATION OF EXPERIENCE* (1974).

Studies have shown that whereas many people tend to be intrinsically prosocial and wish to benefit others in interactions,⁸ the introduction of the law or of enforcement to interactions tends to alter people's behaviors⁹: Various experimental studies have found that stronger third-party external enforcement of contracts tends to "crowd out" intrinsic prosocial behaviors, to increase dishonesty, to reduce trust, and to lead to an unequal sharing of gains among the parties involved.¹⁰ Some researchers have explained these tendencies by the fact that control and punishments, such as those provided by the law, tend to undermine people's confidence in their capability to avoid wrongful actions¹¹ and reduce their sense of autonomy.¹²

Building on this body of literature about the negative effects of the introduction of the law on people's tendency to benefit others, I explore whether and how the introduction of the law affects the preferences that people express. More specifically, I explore whether when the law is made salient in an interaction people express more instrumental and rational preferences accordingly: (i) they discount future payment less (a lower discount rate);¹³ (ii) they prefer products over experiences; and (iii) they are willing to donate less to charity.¹⁴

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- 8 Ernst Fehr & Klaus M. Schmidt, *A Theory of Fairness, Competition, and Cooperation*, 144 Q.J. ECON. 817, 817-18 (1999); LYNN A. STOUT, *CULTIVATING CONSCIENCE: HOW GOOD LAWS MAKE GOOD PEOPLE* (2010); Bruno S. Frey, Felix Oberholzer-Gee & Reiner Eichenberger, *The Old Lady Visits Your Backyard: A Tale of Morals and Markets*, 144 J. POL. ECON. 1297 (1996).
- 9 Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Braiding: The Interaction of Formal and Informal Contracting in Theory, Practice, and Doctrine*, 110 COLUM. L. REV. 1377 (2010).
- 10 Samuel Bowles & Sandra Polanía-Reyes, *Economic Incentives and Social Preferences: Substitutes or Complements?*, 50 J. ECON. LITERATURE 368 (2012); Martin Brown, Armin Falk & Ernst Fehr, *Relational Contracts and the Nature of Market Interactions*, 72 ECONOMETRICA 747 (2004).
- 11 Roland Bénabou & Jean Tirole, *Intrinsic and Extrinsic Motivation*, 70 REV. ECON. STUD. 489 (2003).
- 12 Richard M. Ryan & Edward L. Deci, *Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions*, 25 CONTEMP. EDUC. PSYCH. 54 (2000).
- 13 By 'discount rate' I refer to the amount for which participants are willing to receive a delayed payment.
- 14 I chose to explore the effects of the salience of the law on these particular three types of preferences in order to capture three aspects of people's market preferences: time, altruism and products. As I further report, these aspects have been vastly explored in the context of markets.

II. EXPERIMENTAL DESIGN

In order to test these hypotheses, I take a randomized between-subject experimental approach. I asked respondents to participate in a study but made the law salient as a system that governs the interaction only for about half of them (two experimental conditions). I then asked them to make a set of choices about their preferred payment method. The purpose of the experiment is to test whether the framing of the consent form and payment questions ('legal framing' v. control) affects participants' preferences about their payment for the experiment (real monetary gains).

I conducted the experiment in January 2020. Participants were recruited via MTurk, a crowdsourcing marketplace for Human Intelligence Tasks (HIT), and were randomly assigned to either the 'legal framing' or the control experimental condition.¹⁵ In the 'legal framing' condition, I increased the salience of the law as a system that governs the interaction in the consent form and in the questions that follow (see the Appendix for the materials used in the experiment).

As with all other social interactions, there are probably cultural scripts and rules of behavior that are associated with the setting of the experiment: MTurk participants probably hold particular taken-for-granted expectations and beliefs about tasks and payments on the platform that consciously and unconsciously affect their behavior in the experiment. Yet, because such cultural scripts and rules of behavior affect participants both in the control and in the 'legal framing' condition, any differences observed in the behavior of participants can be attributed to the experimental manipulation. The experiment therefore consisted of two experimental conditions ('legal framing' and control).

After consenting, participants were told that, in addition to the payment for taking the survey, they might receive a bonus. It was explained to them that at the end of the experiment they would receive a lottery ticket and that the lottery would take place after all participants completed all the questions. They were further told that the holder of one lottery ticket, selected at random, would receive the bonus.

They were then asked to make a set of binary choices about whether they wish to be paid a certain amount of money earlier (\$30 today), or a larger

15 Using Amazon Mechanical Turk has some limitations. Most notably, samples are not representative of the population. They tend, for example, to be more liberal in their political orientation as compared to the population. See Jonathan Mummolo & Erik Peterson, *Demand Effects in Survey Experiments: An Empirical Assessment*, 113 AM. POL. SCI. REV. 517 (2019). Nonetheless, because of the experimental design, this limitation should not bias the results I report.

amount of money later (in the following week). I let participants choose between eight such binary decision problems, varying the value of the future compensation they would receive in a week from \$30.5 to \$35. This procedure builds upon previous studies in which similar multiple pricelist procedures were used to elicit participants' time discount rates (i.e., the amount for which participants are willing to receive a delayed payment).¹⁶

Participants were then told that an additional two lotteries would be held at the end of the study. In one lottery, the holder of one lottery ticket, selected at random, would receive a \$30 e-gift card that can be used as payment toward future orders of products from a major online store. In the second lottery, the holder of one lottery ticket, selected at random, would receive a \$30 e-gift card that can be used as payment toward future orders of experiences from a major online venue. Participants were asked in which lottery they wish to participate. They were then asked if — in case they receive one of the two bonuses — they would be interested in donating some of the money to a charity of their choice (they were told that they would be contacted to inquire about the charity and the money would be transferred on their behalf).

As a filler task, participants were then asked a set of questions about how people should behave in their market interactions. After completing the questionnaire, participants were asked a set of demographic questions. The geolocation of participants was also coded. Participants were then instructed on how to receive payment and those who won the lottery were contacted and additionally paid.

Altogether 203 people participated in the experiment. I removed four participants who participated from the same IP address as other participants. I also removed six participants who displayed inconsistent time preferences. The final sample I use in the analysis consists of 193 participants (see Table 1).

Table 1: Sample Characteristics

	count	mean	sd	min	max
Female	193	.4196891	.4947915	0	1
White	193	.8134715	.3905457	0	1
Year born	192	1978.375	10.68027	1946	1998
College or more	193	.5129534	.5011321	0	1

16 Daniel J. Benjamin, James J. Choi & A. Joshua Strickland, *Social Identity and Preferences*, 100 AM. ECON. REV. 1913 (2010).

Out of the 193 participants 93 were assigned to the ‘legal framing’ condition and 100 to the control group.

A. Results

Table 2 presents participants’ preferences and beliefs by the experimental condition.

Table 2: Participants’ Preferences by Experimental Condition

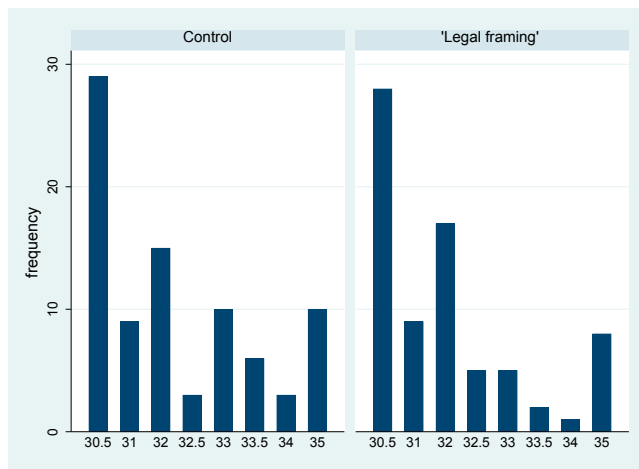
	Control		Legal Framing		N
	mean	sd	mean	sd	
Reservation Price	32.38043	0.9260716	32.08974	0.7853242	160
% Donation to charity	7.81	16.1262	4.902174	11.55214	192
Prefers Stuff (over experiences)	.9	.3015113	.8602151	.3486433	193

Preferences

Time discount rates

The variable ‘Reservation Price’ denotes participants’ lowest accepted delayed payment value. For each participant I capture the lowest amount for which she prefers to be paid in a week from now as compared to being paid \$30 today. In Graph 1, I present participants’ reservation prices by experimental condition.

Graph 1: Participants’ Indifference Points by experimental condition

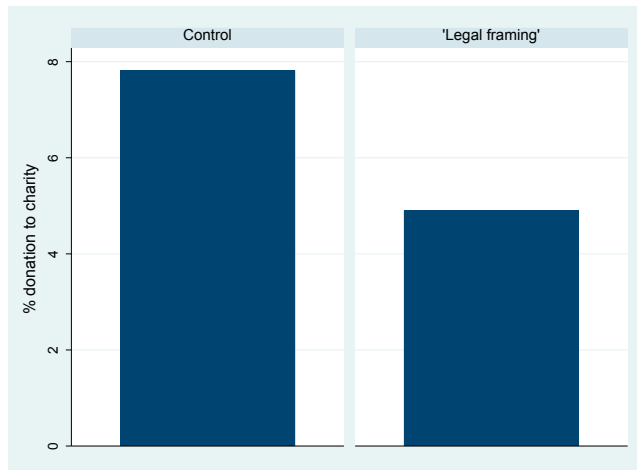


As predicted, participants' time discount rate was lower under the 'legal framing' condition as compared to the control condition. Whereas the reservation price for participants in the control group was 32.38, the reservation price for participants in the 'legal framing' condition was only 32.09 ($p=0.06$).

Donation to Charity

Graph 2 reports the average percentage of the bonus that participants were willing to donate to charity by experimental condition.

Graph 2: Participants' donations to charity by experimental condition

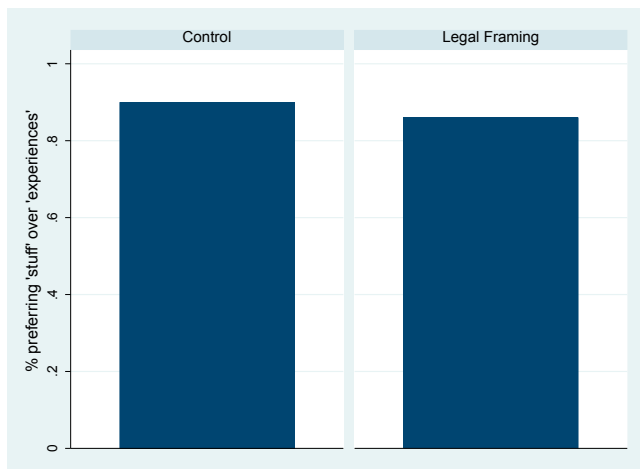


On average, participants under the control condition were willing to donate to charity 7.81% of their bonus. Under the 'legal framing' condition, however, participants were willing to donate only 4.90% of their bonus ($p<0.08$).

Products over Experiences

In Graph 3, I present participants' preferences for gift cards (gift cards for 'products' over 'experiences').

Graph 3: Participants' preferences for gift cards ('products' over 'experiences')



Participants under the 'legal framing' condition tended to prefer gift cards for 'products' over 'experiences.' Yet, these differences are only marginally statistically significant ($z=0.19$).¹⁷

17 In a follow-up experiment that was conducted on MTurk in August 2020, 547 participants were randomly assigned to either the 'legal framing' or the control experimental condition and were then asked to choose among the following six bonus options: (1) a \$30 e-gift card that can be used at Amazon.com; (2) a \$30 e-gift card that can be used at Target.com; (3) a \$30 e-gift card that can be used at the participant's favorite mall; (4) a \$30 e-gift card that can be used at Ticketmaster.com; (5) a \$30 e-gift card that can be used at a movie theater of the participant's choice; (6) a \$30 e-gift card that can be used at a restaurant of the participant's choice. The vast majority of participants (97%) preferred gift cards for products (amazon.com, target.com or a gift card for the mall) over experiences. Differences between the two experimental conditions were statistically insignificant. However, the results and the strong preference for products over experiences (under both conditions) might have been generated by the COVID-19 pandemic in the United States and people's responses to it and therefore should be retested in the future.

III. DISCUSSION

In this Article I show that when the law is salient in an interaction the preferences that people express are altered. When the law is made salient in an interaction people express more future-oriented preferences and tend to donate less money to charity, as compared to when the law is not made salient. People also tend to prefer ‘products’ over experiences, but this gap is only marginally significant.

Because participants probably did not think that the consent form and payment questions were in fact the experiment, and because participants were making choices regarding the actual payment for their participation in the experiment (real monetary gains), I am less concerned about the external validity of this study as compared to the external validity of other lab experiments.

The study has some limitations. Most notably, it measures participants’ expressed preferences and estimates the short-term effects of a legal framing on them. It may be the case nonetheless that a legal framing affects mostly people’s immediate expressions of preferences, but does not alter their preferences in the long term. Yet, it seems that the more individuals and societies are exposed to interactions and arenas of life that are framed as legal (i.e., the more ‘legalistic’ societies are), the more their preferences may be affected in the long term.

The results of the study suggest that the framing of an interaction as legal tends to evoke cultural scripts and implicit rules of behavior (“common knowledge”) that incorporate the shared assumptions in society about the law. In response, participants interpret the interaction as more rational and instrumental and express preferences accordingly. The results of the study further suggest that cultural scripts and implicit rules of behavior about the law are easily and immediately activated in interactions; making the law salient in the consent form resulted in different preferences for otherwise similar participants. This highlights the powerful effect of the salience of the law in interactions on people’s preferences. It suggests that the law affects our preferences constantly and immediately, not only through the concrete incentives it provides and by altering our normative judgments, but also through changing our preferences to more rational and instrumental ones.

APPENDIX

Experimental Materials:

'Legal framing':

You are invited to participate in a research study about preferences. You must be at least 18 years of age to participate. Your participation will take less than 10 minutes.

There are no risks associated with this study and your identity will be kept confidential.

Participation: If you decide to participate in this project, please understand your participation is voluntary and you may withdraw your consent or discontinue participation at any time without penalty. The alternative is not to participate. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

Contact Information: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Protocol Director, Tamar Kricheli Katz at tamarkk@post.tau.ac.il.

If you agree to participate in this research, please click to the next screen and complete the questionnaire.

Please note:

An informed consent is a **legal agreement** (contract) to participate in the research. This means that you **are legally free to choose** whether you wish to answer the questions.

I understand that **I am legally free to choose which questions I wish to answer**

I understand

I do not understand

...

Thank you for legally agreeing to participate in the study!

In addition to the payment for taking this HIT, you may receive a **bonus**. Your actual bonus (if you receive the bonus) will be determined by a random selection from your choices (below) and will be made through Amazon Mechanical Turk.

At the end of the experiment you will receive a lottery ticket. The lottery will take place **today** after all the participants who legally agreed to participate in the study complete all the questions. The holder of one lottery ticket, selected at random, will receive the bonus.

Please choose one pay schedule from each of the pay schedule tradeoff pairs presented below.

...

An additional two lotteries will be held for the participants who legally agreed to participate in the study and completed all questions. In one lottery, the holder of one lottery ticket, selected at random, will receive a \$30 e-gift card that can be used as payment toward future orders of **products** from a major online store. In the second lottery, the holder of one lottery ticket, selected at random, will receive a \$30 e-gift card that can be used as payment toward future orders of **experiences** from a major online venue. In which lottery do you wish to participate?

...

If you receive one of the two bonuses, will you be interested in donating some of the money to a charity of your choice (we will contact you to inquire about the charity and transfer them the money on your behalf). What part of the money (%) would you like to donate?

Control:

You are invited to participate in a research study about preferences. You must be at least 18 years of age to participate. Your participation will take less than 10 minutes.

There are no risks associated with this study and your identity will be kept confidential.

Participation: If you decide to participate in this project, please understand your participation is voluntary and you may withdraw your consent or discontinue participation at any time without penalty. The alternative is not to participate. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

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