

NORMATIVE AMBIGUITY, SOCIAL NORMS, AND THE EXPRESSIVE POWER OF LAW*

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Legal scholars have long debated whether law, through its expressive power, can influence prevailing social norms. Empirical studies inspired by this debate have focused on establishing the existence of an expressive power. However, this dichotomous perspective overlooks the nuances of the theoretical discourse regarding the conditions under which law, independent of any enforcement, can wield greater or lesser impact on social norms. This article employs a regression discontinuity design to examine the expressive power of the law in shaping social norms and measure its sensitivity to contextual factors. Using a preregistered incentivized experimental survey (N = 2,913), we demonstrate that: (1) law, qua law, can indeed influence perceived social norms; and (2) this influence of the law is moderated by the normative clarity of the scenario. The law has the greatest impact on perceived norms in ambiguous situations; when additional normatively relevant information is provided, the expressive power of the law diminishes.

1. Introduction

To what extent can law alone, irrespective of any enforcement, impact social norms? Imagine person A who is driving at a speed of 51 miles per hour on a road where the legal speed limit is 50 miles per hour. Without any additional information, would the mere violation of the legal rule impact your judgment of the social appropriateness of A's behavior? Now, consider the social appropriateness of driver B, who is driving on the same road at exactly the same speed, yet is doing so early on a bright Sunday morning when there is virtually no other car on the road. Or consider the social appropriateness of driver C, who is driving on the same road at the exact same speed at night, during a severe thunderstorm. To what extent does the fact that A, B, and C violated the law influence your judgment of the appropriateness of their behavior? Would the fact that A, B, and C committed the exact same legal transgression have an identical

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impact on your assessment of the social appropriateness their behavior, or might you put less emphasis on the legal speed limit when evaluating B's and C's behavior in light of the additional information regarding the driving conditions?

The findings of this paper suggest that the ability of the law to shift social norms is moderated by the normative clarity of the situation. In ambiguous settings involving limited information (i.e., the case of driver A), people rely on the law to infer what is the prevailing social norm.³ But as a situation becomes clearer from a normative perspective (i.e., the cases of drivers B and C), people's judgments of the situation rely less on the legal prohibition or allowance, and more on the surrounding context. Consequently, the ability of the law to shape the social norm diminishes.

Legal scholars have long since argued that the law has an expressive power (e.g., Sunstein 1996; McAdams 2015). That is, the content of the law itself—notwithstanding any enforcement effort—can impact people's behavior. In situations where people have an interest to converge to a single convention, the law serves as a focal point facilitating coordination (McAdams 2015; McAdams and Nadler 2005, 2008). For example, a law regulating which side of the road cars drive on probably does not need to be enforced aggressively to achieve near-to-full compliance. In addition to its coordinating function, law also conveys information about societal beliefs or empirical facts and by that it can change the social meaning of actions and how certain behaviors are perceived and interpreted in society (McAdams 2015; Sunstein 1996; Tyler 2006). For instance, a law prohibiting smoking in certain areas might communicate to the public information regarding the associated health risks and social attitudes toward smoking.

At the same time, skeptics of the expressive function of law have argued that prosocial behavior may stem from internal normative convictions or preferences, but not from the law itself (e.g., Bicchieri and Mercier 2014; Schauer 2015). According to this line of thought, law, especially in modern societies, does not enjoy the elevated normative standing necessary for it to shift choices by mere expression. Rather, the key tool through which law impacts people's behavior is coercion.

On the backdrop of this theoretical debate, an empirical literature testing the expressive power of the law hypothesis has emerged. But measuring the expressive power of the law is complicated. Observational studies were able to document a correspondence between changes in law and people's behavior (e.g., Funk 2007; Galbiati et al. 2021). Nevertheless, because changes in the law are not imposed randomly on communities, causality is hard to establish. Laws are created by members of the community and, accordingly, it is possible that a preceding shift in norms propelled the enactment of new legislation. It could also be that the observed relationship between law and social norms is driven by other mechanisms. For example, the public discourse and media coverage surrounding a legislative process could impact social norms. Experimental studies could overcome some of these concerns and establish the causal link between the rules described to participants and behavioral outcomes (e.g., McAdams and Nadler 2005; Bohnet and Cooter 2003). Yet, these studies are subject to other internal and

³ The term social norms encompasses both descriptive norms (regularities in people's behavior) and prescriptive norms (commonly held views regarding how people ought to behave). A related issue is people's first-order beliefs—what they think is the right thing to do, irrespective of the prevailing views. The experiment reported in this paper focuses on prescriptive norms.

external validity concerns. Most notably, it is hard to manipulate the existence or the content of law in a truthful and realistic manner, independently of the actual laws in the relevant jurisdictions.

A promising solution recently introduced by Lane et al. (2023) uses *legal thresholds*—settings in which the regulated behavior lies on a numeric continuum, and legal liability hinges on crossing a certain point on that continuum. Examples of such thresholds include speed limits, noise caps, quantity presumptions alluding to illicit drugs, and minimal age requirements. This discontinuity in legal liability right around the threshold allows one to isolate the effect of the law on the way a certain behavior is perceived, while holding everything else (almost) constant. Specifically, this approach relies on the assumption that behaviors that are marginally above or below the threshold are not meaningfully different—e.g., driving at a speed that is one mile per hour above or below the speed limit. If nevertheless the incremental step of crossing the legal threshold affects the perceived social norm to a greater extent than the effect of equal size steps that lie wholly above or below the legal threshold, then the larger shift in the perceived social norm right at the threshold can be attributed to the law.

Using this framework Lane et al. (2023) and Goerges et al. (2023) demonstrate in numerous different contexts that law shifts the perceived social norm. For example, Lane et al. (2023) show that small incremental changes right above or right below the legal speed limit have little effect on people’s perceptions of the appropriateness of a driver’s behavior. Yet there is a relatively large gap in people’s perceptions of the appropriateness of the driver’s behavior between driving one mile above and one mile below the speed limit, suggesting that law, *qua law*, has an expressive power.

These findings can certainly be viewed as an important proof of concept, demonstrating that the law can have an expressive function. But they also raise the question, what are the boundary conditions under which law can exert this power? This Article takes a step forward from the current binary debate—does the law have an expressive power or not—toward identifying the factors interacting with the expressive function of the law, thereby providing a richer and more realistic understanding of when law can be expected to affect social norms or not.

Particularly, this article focuses on the interaction between normative ambiguity and the expressive power of the law. Existing studies rely on relatively brief vignettes, providing subjects with minimal contextual details (Lane et al. 2023; Goerges et al. 2023). Presumably, such vignettes might amplify the role of the law in providing information and facilitating coordination, since there are fewer competing factors that subjects can rely on when assessing the experimental materials.

We hypothesize that the expressive power of the law is attenuated by normatively relevant information. According to this hypothesis, the law alone might substantially sway people’s perceptions of the social norm in situations that are normatively ambiguous, since in such settings people may turn to the law for guidance. As H. L. A. Hart (2012: 40) famously suggested, law might guide people’s behavior using its normative power when people are “puzzled” as to how to act, and therefore seek guidance. This is especially true if people trust the legitimacy of lawmakers, their expertise, or their ability to properly aggregate the public’s view on the matter (Burke and Sommers 2022; McAdams 2015; Sunstein 1996; Tyler 2006). However, in the presence of more normatively relevant information to base opinions on, the

role of law in assessing the appropriateness of behaviors diminishes. Thus, as more normatively relevant information is introduced, it is possible that this information will play a greater role in shaping beliefs and opinions, thus diluting the expressive power of the law.

To test this hypothesis, we conducted a preregistered between-subjects incentivized experimental survey. The experiment builds on the design introduced in Lane et al. (2023), and uses it to measure the influence of normative ambiguity on the expressive power of the law. More specifically, the experimental survey manipulates the background information included in the vignettes, while holding the core behavior (e.g., driving just above or just below the speed limit) constant. The variations in the underlying facts add positive or negative context to the scenario, enabling us to test whether the added moral clarity attenuates the expressive power of the law.

The results confirm both the ability of the law to influence the perceived social norm, and the sensitivity of that ability to the moral clarity of a situation. In all four experimental vignettes, when subjects evaluated a skeletal vignette that included relatively little information, we detect a substantial and statistically significant discontinuity in the perceived social norm right around the legal threshold. Yet this discontinuity is sensitive to nuanced interventions in the vignettes' fact patterns. In three of the four vignettes, adding normatively relevant negative or positive information significantly reduced (and at times even voided) the extent to which subjects' evaluation of the prevailing social norm hinged on the law. Thus, our results corroborate existing findings that demonstrate that the law has an expressive power, but they also highlight the limits of this power.

The article is structured as follows. Part 2 reviews the theoretical and empirical literature on the expressive power of the law, and develops the conceptual framework for the relationship between normative ambiguity and the expressive power of the law. Part 3 describes the experimental design and hypothesis. Part 4 presents the results. Part 5 discusses the findings and possible implications. A short conclusion summarizes.

2. The Expressive Function of Law and its Boundaries

2.1. Theoretical Framework

Social scientists have studied social norms from various perspectives including sociology, psychology, and economics (e.g., Horne and Molbron 2020; Reno et al. 1993; Elster 2020; Ostrom 2000). The focus of this body of work is both on *descriptive* and *prescriptive* norms (Cialdini et al. 1990). Descriptive norms involve documenting regularities in people's behavior, while prescriptive norms center around commonly held views regarding how people ought to behave. These prescriptive norms are then enforced by a diverse set of social tools ranging from gossip to violence (Ellickson 1991). As this literature has demonstrated, social norms are a central institution in all communities, and they govern a broad array of human activities such as communication patterns, dining etiquette, clothing choices, queuing behavior, gift exchange practices, and expressions of gratitude.

In recent decades, legal scholars have investigated the interaction between social norms and the law (e.g., Cooter 1998; Posner 2002; McAdams 2015; for reviews see McAdams and

Rasmusen 2007 and Nadler 2017, 2024). Research on law and social norms has enriched a broad array of legal and policy discussions. In the areas of commercial and private law, this research has contributed to the understanding of the practices within close-knit contracting communities (Bernstein 1992, 2001), helped elucidate the function of the modern corporation (Rock and Wachter 2001; Skeel 2001), and improved our understanding of the role of family law (Scott 2000). In the area of public law, research on social norms has highlighted the special role that the law might play in combating discrimination (McAdams 1995), and has clarified the way in which international law functions (Ginsburg and McAdams 2003; Geisinger and Stein and 2007).

In the area most closely aligned with this project—criminal law—research on social norms has had a significant impact on the legal literature. Scholars have posited that the enactment of many legal prohibitions can be explained by a desire to express disapproval of certain acts and cultivate a social norm against them, rather than by an explicit intent to enforce these prohibitions using legal sanctions (e.g., Kahan 1998; Dharmapala and McAdams 2003). Other studies in the area have explored the relationship between legal and nonlegal sanctions (Kahan 1996; Dana 2001; Teichman 2005), and presented evidence of private norm enforcement by individuals (Miller 2003).

A core insight within this body of work is that the law has an *expressive power* (Sunstein 1996). This expressive power underlies the law’s ability to shift behavior without any form of coercion. As Sunstein notes, legal interventions can influence behavior “when the relevant law announces or signals a change in social norms *unaccompanied by much in the way of enforcement activity*” (1996: 2032, italics in original). Accordingly, people might refrain from smoking in public, scoop their dog’s poop, and use a facemask in crowded areas, simply because the law requires them to do so.

A leading theory explaining why the law holds such an expressive power was developed by McAdams (2000A, 2000B, 2015). According to this theory, law can function as a focal point that helps people coordinate their behavior. People might obey traffic laws and respect other people’s property rights in order to avoid a conflict and to facilitate cooperation. In addition, law can inform people about societal attitudes regarding the appropriateness of behaviors. Elected officials’ role and expertise is to identify the public’s attitudes and promote policies that reflect them. Accordingly, when a legislature (and to some degree other branches of government as well) bans certain conduct, this ban may serve as a credible source of information about what behavior is viewed as inappropriate by most people. Because most people seek approval from others—whether for instrumental reasons such as commercial reputation, or for internal reasons such as self-esteem—they tend to follow the normative cues set by the legal system.

However, some scholars have questioned the law’s ability to change behavior merely by expressing disapproval. Bicchieri, for example, argues that “change initiated in a top-down fashion, typically in the form of legislative interventions, seldom works” (2017: 144). According to this line of thought, social norms do not automatically shift in response to legal enactments. Rather, for a legal change to alter norms, it must be perceived as legitimate and, even more importantly, it must promote outcomes that the public views as desirable (Bicchieri and Mercier 2014: 65). Similarly, Schauer (2015: 140–53) expresses doubt as to the independent impact that the law might have on behavior and norms, and highlights the

centrality of coercion to any legal regime. At least in the United States, there is no general norm of respect for the law that triggers criticism and disapproval purely because a law was violated. Consequently, according to Schauer, the mere pronouncement of an act as illegal will not shift attitudes, if people hold clear normative judgments about that act. For example, while pedestrians know very well that crossing a small one-way street on a red light when there is no car in sight is against the law, they will continue to do so if they feel that adhering to the law in those circumstances is not justified.⁴

A potential way to reconcile these two views is to recognize that, much like any other social norms, the meta-norm of adhering to legal rules is sensitive to contextual factors. This is true in the lab: the social norms governing behavior in dictator games are sensitive to slight nuances in the decision-making environment, such as who possesses the funds that the dictator can allocate (Krupka and Weber 2013). And this also holds in the field: the norms governing the creation of noise, for example, hinge on situational factors and differ between the library and the marketplace (Aarts and Dijksterhuis 2003). Similarly, the expressive function of a law might differ depending on the context: swaying social norms in some instances, while having little impact in others.⁵

The specific contextual factor this study focuses on is normative ambiguity. The literature has highlighted the role of normative ambiguity—that is, lack of clarity regarding the appropriate behavior—on the construction of social norms. When people are unsure about the governing injunctive norm, they often look to descriptive norms for guidance and derive ought from is (Cialdini et al. 1990; Lapinski and Rimal 2005). Conversely, in normatively clear situations, people tend to make judgments regarding injunctive norms without reference to descriptive norms. As Lapinski and Rimal note, “[i]n the absence of ambiguity, however, observation of others engaging in a behavior is likely to have little bearing on individuals’ own understanding of the appropriate mode of conduct; instead, they can rely on their own internal cues to determine how they should act” (2005: 140–41).

A similar connection between normative ambiguity and the law’s role in society lies at the center of H.L.A. Hart’s jurisprudence. As Hart (2012: 40) observes, law does not operate solely through coercion by setting prices for “bad” people who wish to act selfishly. Instead, it also addresses the “puzzled” individual—someone “who is willing to do what is required, if only he can be told what it is[,]”—offering guidance through its normativity without relying on sanctions or enforcement. Hart implicitly suggests that for law to exert its normative guiding power, individuals must be “puzzled” (at least to some extent). Presumably, when individuals are not puzzled, law’s capacity to influence behavior without coercion diminishes. McAdams (2015: 197–98) builds on this insight in his discussion of the limits of law’s expressive power, noting that in normatively clear contexts—such as theft, in his analysis—law wields little expressive influence.

⁴ Apparently, according to Schauer (2015: 152–53) a norm of blind compliance to the law might exist in other societies. Specifically, he reports that in Finland locals tend to stand obediently on the sidewalk when facing a “Don’t Walk” sign even when there are no police officers or cars in the area.

⁵ The literature has discussed possible moderating factors of the expressive power of the law. Most notably, scholars have stressed the potential connection between law’s legitimacy and its expressive power (Burke and Sommers 2022; Nadler 2017; McAdams and Rasmusen 2007). This argument builds on the voluminous literature on legitimacy and compliance (e.g., Jackson et al. 2012; Tyler and Jackson 2014).

This framework suggests an interaction between normative ambiguity and the expressive power of law. Law, like social norms, is a social institution that guides people's judgments. And this guidance is expected to have greater weight when people do not have strong notions regarding the appropriateness of the behavior. Thus, the expressive function of law will be especially meaningful in an environment that entails normative ambiguity (Nadler 2024). When driving on an unfamiliar road for the first time, the law might be informative regarding the expected driving conditions and the behavior of other drivers. But in other cases, the law might offer people little guidance and thus be easily ignored—like in the example of a person jaywalking at an empty secluded pedestrian crossing that they use regularly.

2.2. Empirical Evidence on the Connection between Law and Social Norms

Empirically testing the connection between law and social norms is a difficult endeavor. Notably, because normative judgments influence legislation, it is impossible to ascertain the direction of causality when observing a correspondence between changes in legislation and changes in norms. Furthermore, legal changes often coincide with other factors such as political debate, media coverage, and academic research, complicating the attribution of any change in societal norms solely to the law. Consequently, studies often bundle all these factors when studying the expressive power of law (e.g., Htun and Jensenius 2022).

Notwithstanding these challenges, empirical studies have attempted to document the expressive power of law using various methodologies, both observationally and in the laboratory. The experimental strand of the literature demonstrates the expressive power of law in stylized lab setups. McAdams and Nadler (2005, 2008) show that merely highlighting a strategy in a Hawk/Dove coordination game with a conflict of interest increases cooperation rates, suggesting that law may generate such salient focal points in real-world scenarios (see also Bohnet and Cooter 2003 and Feldman and Nadler 2006). Along similar lines, in public good games, Engel and Kurschilgen (2013) show that asking participants whether they think a contribution norm has emerged in their group, or explaining to participants that common behavior can turn into normative expectations and customary law, could increase individual contributions, and Galbiati and Vertova (2014) demonstrate that unenforceable contribution recommendations in a public goods game could increase individual contributions (see also Barron and Nurminen 2020).

Early observational endeavors focused on identifying changes to laws that *de facto* had little or no penalty. A notable early example can be found in Funk (2007), which examines the expressive power of a Swiss law creating a duty to vote that was backed by a minimal fine (sometimes as low as one Swiss Franc). Utilizing the staggered abolition of this duty across Swiss cantons, Funk finds a significant decline in voter turnout following the elimination of the duty. Similarly, Wittlin (2011) studies the expressive effect of seatbelt laws across U.S. states, and reports a significant increase in seatbelt use in Tennessee after the 1986 enactment of a seatbelt mandate, even though the mandate carried no penalty (until 1994, when a penalty was added to the law).

Later studies focused on the impact of dramatic shifts in the legal landscape on social norms. A well-known shift is the legal recognition that many jurisdictions granted to same-sex relationships. Tankard and Paluck (2017) conduct a longitudinal time-series study on the impact of the U.S. Supreme Court's ruling in *Obergefell v. Hodges* recognizing same-sex

marriage on social norms. They document an increase in perceived social norms supporting gay marriage following the ruling, with no parallel change in personal attitudes. Eisner et al. (2021) focus on a relatively unpublicized amendment to the Swiss adoption law that allowed same-sex partners to adopt their partner's child. They found that for participants with no prior knowledge about the legal change, informing them about the amendment led to perceptions of less societal disapproval of same-sex parenting.⁶

Another major legal shift occurred during the COVID-19 pandemic. As part of the legal response to the pandemic, public health regulation targeted physical social interactions, which are normally perceived as an integral part of human life. This body of law attempted to alter well-established social norms, and to quickly shift human behavior (e.g., Teichman and Underhill 2021). Galbiati et al. (2021) show a sharp discontinuity in the perceived social norm relating to social distancing following the abrupt introduction of a national lockdown in the United Kingdom at the beginning of the pandemic. Similar results were documented by Casoria et al. (2021) in France. As they show, there was discontinuity in perceptions of the appropriateness of social gatherings following a change in the law. Specifically, the introduction of the law limiting gatherings at the beginning of the pandemic significantly decreased appropriateness, while the abrogation of the law eight weeks later was followed by a significant increase in perceived appropriateness.

Taken together, the experimental and observational studies provide strong support for the expressive hypothesis. Nevertheless, the well-recognized tradeoff between internal and external validity means a clear indicative proof remains elusive. In a recent paper, Lane et al. (2023) introduced a novel framework that allows one to experimentally establish a causal connection between actual legal rules and perceived social norms, while maintaining high external validity by testing the impact of real laws. The core insight of their framework utilizes numeric legal thresholds that create a bright-line rule for legal liability. Such thresholds could refer to the age of a person involved in the regulated conduct (e.g., purchasing alcohol, engaging in sexual behavior, getting a tattoo) or to the activity itself (e.g., blood alcohol level, speed limit). By measuring social attitudes toward behaviors just above and below the legal threshold, they isolate the law's effect on perceived appropriateness in five different examples of numeric legal thresholds: age of consent, age for purchasing alcohol, blood alcohol content, speed limit, and the amount of cash carried at a border. For example, on the backdrop of a speed limit of 70 miles per hour they measure social attitudes towards the act of driving just below and just above the legal threshold (66, 67, 68, 69 miles per hour vs. 71, 72, 73, 74 miles per hour). Their underlying explicit (and arguably realistic) assumption is that the behaviors in the different experimental conditions are almost identical except for their legal status. Thus, if there exists a sharp discontinuity in the perceived social norm right around the legal threshold, this discontinuity can be attributed to the law. And indeed, their results show that for each regulated activity, there was a significant discontinuity in social attitudes toward the depicted

⁶ Aksoy et al. (2020) also study the impact of the legal recognition of same-sex relationships while focusing on individual attitudes rather than perceived social norms, and obtain similar findings. Other studies in the field have explored the relationship between court rulings and public attitudes; see, e.g., Kugler and Strahilevitz (2017) and Barak-Corren and Noam Shlomai-Kunitz (2024). Finally, a notable body of experimental work has studied the impact of international law on domestic public opinion with mixed results (for an overview, see Cope 2023). While some of these studies show that international law can decrease support for policies that violate it (Chilton 2014; 2015), others have documented a backlash effect in which public opinion is swayed in the opposite direction (Cope and Crabtree 2020; Lupu and Wallace 2019).

behavior at the legal threshold: once a behavior was illegal it was perceived as significantly less appropriate.

This approach allows for measuring the expressive power of law in a controlled environment. However, existing studies focus on very brief vignettes, with minimal contextual details (Lane et al. 2023; Goerges et al. 2023). Given the vignettes' inherent vagueness, these are likely the conditions in which the role of the law in providing information and facilitating coordination is maximized. Accordingly, the expressive function of the law is expected to be strongest in these settings.⁷ In light of the theoretical framework presented above, we hypothesize that if normative ambiguity is reduced, the expressive power of law is diluted. As described in the next section, the experimental framework introduced in this paper examines the interaction of illegality and normative ambiguity in order to explore whether law's ability to shift the perceived social norm is moderated by the normative clarity of the situation.

3. Experimental Design

3.1 Overview

To study the interaction between normative ambiguity and law's impact on social norms, participants were presented with four experimental vignettes that describe activities in which legal liability hinges on a numeric threshold. We implemented a 3x8 factorial design, which randomly varied for each of the four vignettes both the distance from the legal threshold and the normative ambiguity of the scenario. With respect to the first dimension, distance from the legal threshold, each vignette included eight different conditions, with four variations just above the legal threshold and four variations just below it.⁸ For example, in a vignette dealing with a legal speed limit of 70 miles per hour, the driver's speed was randomly assigned to be 66, 67, 68, 69, 71, 72, 73, or 74 miles per hour. The second dimension, the normative ambiguity of the scenario, altered the scenario in a normatively meaningful way by adding facts that are relevant to the assessment of the appropriateness of the behavior described in the vignette. The added information could be either positive (e.g., favorable driving conditions) or negative (e.g., adverse driving conditions). Notably, the purpose of adding normatively relevant information is not to explore its impact on the overall assessment of the social acceptability of the behavior, but rather to investigate the interaction between normative ambiguity and the expressive function of law. Comparing the impact of the legal threshold on the perceived social norm across scenarios allows us to test whether the expressive power of law diminishes as scenarios become normatively clearer.

⁷ Furthermore, existing studies have generally not examined the forces moderating the expressive power of law. Lane et al (2023) use post-hoc answers that their participants provided to identify factors that explain some of the variability they observe. They suggest that the expressive power of law might be moderated by the perceived intentionality of the act and the perceived ease of measurability of behavior.

⁸ This part of the design builds on that of Lane et al. (2023) and Goerges et al. (2023). However, we altered several details in the instructions, incentive structure, and vignettes, and in order to examine the limits of the expressive power of law we added the second dimension of normative ambiguity. Therefore, this experiment should not be viewed as a replication of the original study.

3.2 Vignettes

Participants were presented with four experimental vignettes: *Speed Limit*, *Lorry Weight*, *Casino*, and *Age of Consent*. In all vignettes the content of the relevant legal rule, including the legal threshold, was subtly woven into the scenario. In addition, the text of the vignettes made clear that the people depicted in it are aware of the legal threshold, and of the relevant facts vis-à-vis that threshold. This design alleviates the concern that participants' assessment of the behaviors may be influenced by their assumptions regarding awareness of the law or facts.

Following Lane et al. (2023), we disguised the fact that we were interested in the evaluation of behaviors regulated by legal thresholds, by adding to the four vignettes of interest ten additional filler vignettes not regulated by legal thresholds. Specifically, the filler vignettes included situations in which it would be sensible to assess the social appropriateness of a behavior, but were either not regulated by law (e.g., not giving money to a street beggar) or were regulated by law but not via legal thresholds (e.g., bribing a public official). The filler vignettes did not include any manipulations and were identical across participants. All vignettes appeared in random order, except the first three filler vignettes, which were fixed and constructed to train people to distinguish between social appropriateness and legality.⁹

As noted, the four experimental vignettes operationalized the normative ambiguity of the scenario. For three of the experimental vignettes (*Speed Limit*, *Lorry Weight*, *Casino*), the normative ambiguity dimension is identical in structure and includes three conditions. The first is a benchmark condition, which includes a limited description of the situation and thus entails the greatest normative ambiguity. The other two conditions add positive or negative normatively relevant information to the vignette, thus reducing the normative ambiguity. In the *Age of Consent* vignette, normative ambiguity was operationalized differently, by gradually increasing the age gap between the two people depicted in the vignette. The four experimental vignettes are described below:

Speed Limit: A man is driving between two cities. He turns onto a road and notices a sign informing motorists that the legal speed limit on the road is 70 miles per hour. The speed at which the man drove was manipulated to be 66, 67, 68, 69, 71, 72, 73, or 74 miles per hour. For the normative clarity dimension, the *benchmark* condition provides no information on road conditions and the underlying motivation for driving. The *positive condition* states that the driver is on his way to the hospital where his son is being treated and notes that the driving conditions are excellent (i.e., good weather and an empty road). The *negative condition* states that the driver is heading home tired after a long shift at work, and notes that the driving conditions are adverse (i.e., darkness and a slippery road).

Casino: A man works at a casino in London and is responsible for making sure that people under the age of 18 do not enter the casino, as is required by law. One evening he sees a young patron in line and asks her to present her ID. The ID shows that the patron is about to turn 18 in seven, five, three or one day, or turned 18 one, three, five, or seven days ago. The

⁹ The behavior depicted in the first three vignettes varied in the degree to which legality was involved. In one vignette the behavior was regulated by the law and the person did not violate the legal rule (a person deciding not to illegally download a movie), in a second vignette the behavior was regulated by the law and the person violated the legal rule (a person driving very slowly and safely without using a seatbelt), and in the third vignette the behavior was not regulated by any legal rule (a person choosing between spending money on a holiday and donating money to a charity).

man lets the patron enter the casino. For the normative clarity dimension, the *benchmark condition* provides no additional information. The *positive condition* states that the young patron is accompanied by her mother, who promises that her daughter will always be with her and will not gamble. The *negative condition* states that the man knows that the young patron is struggling with a gambling addiction.

Lorry Weight: A lorry driver at a construction company transports steel bars from a central warehouse to various construction sites. The small two-axle lorry can legally carry a maximum weight of 7.5 tons. The driver loads the lorry and weighs it at the on-site weighbridge, which indicates that the total weight of the loaded truck is 7.46, 7.47, 7.48, 7.49, 7.51, 7.52, 7.53, or 7.54 tons. The driver then drives to the construction site with the haulage. For the normative clarity dimension, the *benchmark condition* provides no additional information. The *positive condition* states that the driver is experienced and that he drives slowly and carefully to a nearby site, on a service road used only by site workers. The *negative condition* states that the driver is inexperienced and is driving to a distant site on a main road with heavy traffic as well as narrow winding trails.

Age of Consent: A man meets a girl at a social gathering, invites her to come to his home, and she agrees. At his home the man tells the girl that he wants to have sex with her, but that she looks young and therefore he asks her whether she is above the legal age of consent of 16 years. The girl presents the man with an ID confirming that she is aged 15 years and 8, 9, 10, or 11 months, or 16 years and 1, 2, 3, or 4 months. The vignette concludes by noting that the girl tells the man that she wants to have sex with him, and the two have sex.

The normative clarity dimension in *Age of Consent* was operationalized differently than in the other three vignettes. More specifically, we conjecture that as the age gap between the sexual partners decreases, the scenario depicted in the vignette becomes more normatively ambiguous. Thus, we set the age of the older sexual partner in the *benchmark condition* at 16.5, an age which is relatively close to the age of the female partner (note that English criminal law does not account for the age gap between the parties and prohibits the conduct described in the vignette). The two other conditions make the scenario normatively clearer by raising the age of the older sexual partner to 28 and to 40.

The conjecture that the age gap between the sexual partners impacts normative ambiguity rests on three lines of thought. First, the underlying societal goal of age-of-consent laws is to prevent coerced sex and the exploitation of minors (Oberman 2000).¹⁰ Research indicates that larger age gaps are perceived as less consensual (Reitz-Krueger et al. 2016), making moral transgressions clearer (Essack and Toohey 2018: 86; Fischel 2016: 108). Second, while the age gap between partners is irrelevant under English criminal law, evolving discussions, proposals to reform the law (Preskey et al, 2023; Dewhurst et al. 2025), and recent legislative steps with respect to a reporting duty (Bill 187, 2025), suggest that social norms in the area are evolving. Finally, in terms of prevailing sexual behavior, while early sexual activity is relatively common in the United Kingdom, large age gaps are not. According to the most recent national survey approximately 30% of participants aged 16-24 report having their first intercourse before age 16 (Mercer et al 2013), but only 5% of women report their first sexual encounter was with a man who is ten or more years older than them (Mercer et al. 2006). Thus,

¹⁰ To be sure, age-of-consent laws are not focused only on consent. Another issue that is often featured in the public discourse is preventing unwanted teen pregnancies (Michael M. v. Superior Court 1981: 470).

a clear deviation from the prevailing descriptive norm, could render the injunctive norm less ambiguous.

To confirm the theoretical conjecture that as the age gap between sexual partners grows the scenario becomes normatively clearer, we ran a separate experiment ($N = 262$). Participants in this experiment were presented with a vignette depicting a 16-years-old girl having consensual sex with a male partner whose age was randomly set to be 16.5 or 28 years. The vignette made no reference to the law, so it could capture peoples' views regarding the social norm governing the situation itself, irrespective of their views on legal compliance. After reading the vignette, participants were asked four questions: First, participants were asked to rate the social appropriateness of the scenario (exactly as in all other vignettes, see section 3.3 below). Second, participants were asked how confident they were of their ability to assess how most British people would judge the situation they evaluated (on a scale from 1 to 9). Third, participants were asked to imagine that the male partner's age changed to the age viewed by the other experimental treatment (16.5 or 28), and were then asked again to rate the social appropriateness of the new situation. Finally, participants were asked in which of the two versions of the vignette they felt more confident of their ability to predict the judgments of other participants—when the male partner was 16.5 or 28 years old (dichotomous choice).

The results confirm the hypothesized connection between the age gap and normative clarity. First, participants rated the scenarios as significantly less appropriate when the partner was 28-years-old than when the partner was 16-years-old, with consistently lower variation in their responses, in both the first and third questions. In addition, as hypothesized, participants were more confident in their ability to predict the appropriateness judgments of other participants when the male partner was 28 years old compared to when he was 16.5 years old. In a between-subjects comparison of participants' answers to question 2, participants' reported average confidence in their answer was 7.22 when asked about the 28-years-old partner and only 6.37 when asked about the 16.5 years-old partner (t-test $p < 0.001$). In a within-subjects comparison, 63% of participants answered that they were more confident in their ability to predict the judgments of other participants when the male partner was 28 years old. The detailed design of this additional experiment is reported in Appendix B.

3.3 Dependent Variable

The dependent variable in the experiment is the perceived social norm. Participants were asked to convey their beliefs on the social appropriateness, while specifically instructed and incentivized to state what they believe “most people taking this survey would agree is the ‘right thing to do’ (regardless of whether it is legal or not).” That is, the survey does not elicit participants' first-order beliefs regarding the appropriateness of the behavior described in the vignettes. Rather, it documents how participants believe the majority of the community they belong to judges the appropriateness of the situation depicted in the vignette. Additionally, the instructions directed participants to assess social appropriateness as a distinct construct, independent of legality.

As is standard in the social-norms literature, judgments of social appropriateness were measured using a four-point ordered scale: “Very appropriate,” “Somewhat appropriate,” “Somewhat inappropriate,” and “Very inappropriate” (Krupka and Weber 2013; Barr et al.

2018; Krupka et al. 2022; Lane et al. 2023). To incentivize participants to provide an accurate assessment of their perceptions of the prevailing social norm, we used the Krupka and Weber (2013) method (for a discussion see G6rges and Nosenzo 2020: 300–303), which has been shown to be an effective tool to measure second-order beliefs (Fallucchi and Nosenzo 2022).¹¹ In this study, a participant was paid a bonus in addition to their participation fee if their evaluation of the behavior in a vignette was the same as that chosen by the most other participants in the same version of the vignette.¹²

3.4 Hypotheses

Our focus of interest is the expressive power of law, as measured by the regression discontinuity around the legal threshold in each of the four experimental vignettes. Our *first hypothesis* is that law will exert an expressive power in the benchmark conditions. Documenting this effect is a precondition for exploring our main research question, which focuses on the limits of this power. Our *second hypothesis* is that the expressive power of law is moderated by additional normatively relevant information. Thus, we predict an interaction effect between the legal threshold and the level of context provided in the vignettes.

Note that while we hypothesize that the expressive power of law will be greater in the benchmark condition across all vignettes, in *Speeding*, *Lorry Weight*, and *Casino* we do not control for the degree of “positiveness” and “negativeness” of the surrounding circumstances, and thus we are unable to generate a prediction about the comparative size of law’s expressive power in the positive and negative conditions. In *Age of Consent* our theoretical framework suggests that as the age of the male sexual partner increases so will the negative normative clarity of the situation. Hence, we hypothesize that as the age of the male partner increases, the impact of the law on social norms will diminish.

Finally, while we predict that the positive conditions in the three vignettes (*Speeding*, *Lorry Weight*, and *Casino*) will be viewed more favorably than the corresponding negative conditions, we do not make any predictions about the relative overall ranking of the positive and the negative conditions vis-à-vis the benchmark condition. This lack of predictability stems from the fact that we cannot forecast the overall normative assessment in the benchmark condition, which by design includes limited information.

3.5 Procedure

The experiment was conducted online using the Prolific platform. Participants were adult residents of the United Kingdom, with English as their first language. They received a £1.5 participation fee, and had the potential to earn an additional £2 bonus if their evaluation of the behavior in a vignette was the same as that chosen by the most other participants in the same version of the vignette. A total of 2,913 participants took part in the study (50 percent female), with an age representation of: 8.5 percent aged 18–24, 29.5 percent aged 25–34, 27 percent

¹¹ To be sure, there are mixed findings on the importance of incentives for the accurate elicitation of social norms (compare, e.g., Krupka et al. 2022 with Veselý 2015).

¹² To be eligible for the bonus payment, subjects were also required to answer all of the questions in the survey.

aged 35–44, 18 percent aged 45–54, 17 percent aged 55 and older.¹³ The experimental tools, recruitment procedures, exclusion criteria, and data analysis strategy were all preregistered at AsPredicted.com (#173795). The study was approved by the ethics committee at the Hebrew University.

4. Results

We start by plotting the norm functions, showing the average *appropriateness ratings* of the behaviors that subjects evaluated for the different vignettes. In accordance with the social-norms literature, we assign equally spaced values of +1, +0.33, –0.33, and –1 to the ordered ratings “Very appropriate,” “Somewhat appropriate,” “Somewhat inappropriate,” and “Very inappropriate,” respectively. Accordingly, the norm functions have positive values for actions evaluated as appropriate on average, and negative values for actions evaluated as inappropriate. Additionally, we report the *appropriateness ratio* – the proportion of participants rating the behavior as either very appropriate or somewhat appropriate. While the appropriateness ratio is less nuanced than the appropriateness ratings, it captures the core judgment that people make when evaluating the vignettes without the assumptions associated with the linear transformation of judgements to a numeric scale. The figures below show both appropriateness ratings and appropriateness ratios for each vignette across the different experimental conditions. The dashed black line on the x-axis indicates the legal threshold. Actions to the left of the line are illegal and actions to the right of it are legal. Appendix A presents the distribution of participants’ answers for each vignette across all 24 experimental conditions.

Overall, the results show that the norm functions for the benchmark conditions follow an intuitive pattern, with the perceived inappropriateness of the act increasing as the depicted act becomes more harmful (i.e., higher speed, higher weight, lower age). Yet this trend is not linear. Rather, there is a discontinuity right around the legal threshold: once the legal threshold is crossed the perceived appropriateness jumps downwards, reflecting the expressive power of law. In particular, we find that the law has strong expressive power in the *Age of Consent*, *Lorry Weight*, and *Casino* vignettes, and a meaningful but weaker expressive power in the *Speed Limit* vignette.

With regard to the relationship between normative ambiguity and the expressive power of law, the results show that adding normatively relevant information significantly impacts people’s assessment of the perceived social norm. Overall, the behaviors in conditions with additional positive information were seen as more appropriate than the behaviors in conditions with additional negative information. In addition, normative clarity moderated law’s expressive power: the discontinuity around the legal threshold was larger in the benchmark conditions, and smaller in the conditions that provided participants with additional normative information.

¹³ Our preregistered exclusion criteria were to exclude participants who satisfy at least one of the following conditions: (1) labeled by Qualtrics as likely an algorithm; (2) labeled by Qualtrics as likely a duplicate, or registered with the same prolific ID more than once; (3) failed to answer correctly a post-experimental comprehension question; and (4) failed to evaluate correctly at least one of three filler vignettes that reflect clearly good or bad behavior (for example, subjects who judged the decision of a CEO to bribe a government official as “very appropriate” or “somewhat appropriate”). Overall, 87 participants were excluded from the study based on these criteria.

Given the contextual differences and the somewhat distinct designs, we report the results separately for each vignette.

In *Age of Consent*, the two conditions (aged 28 and aged 40) increase normative clarity in a negative direction, relative to the benchmark condition (age 16.5). And indeed, in this vignette there is a drop of 0.99 units in the appropriateness rating right around the legal threshold when the male partner is 16.5 years old, and a drop of 56 percentage points in the appropriateness ratio. These differences decrease to 0.41 units and 15 percentage points when the partner's age is 28, and to 0.35 units and 10 percentage points when the partner's age is 40.

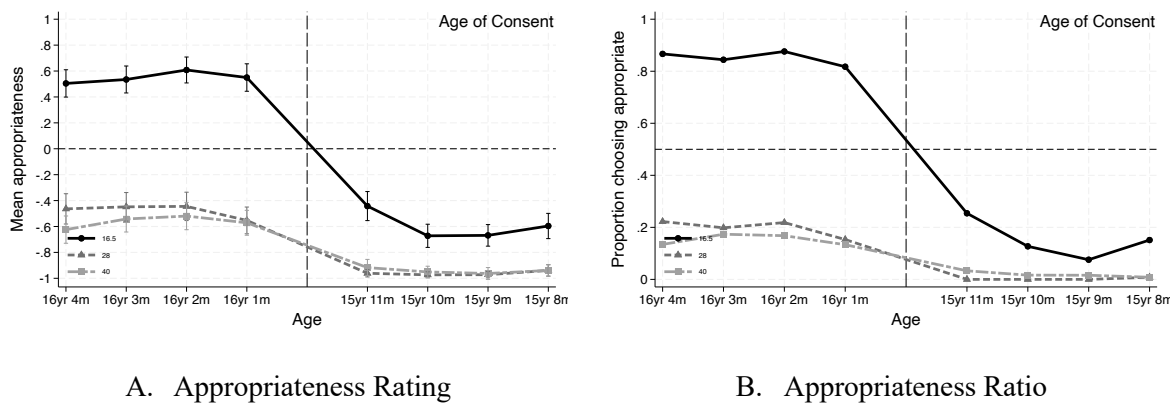
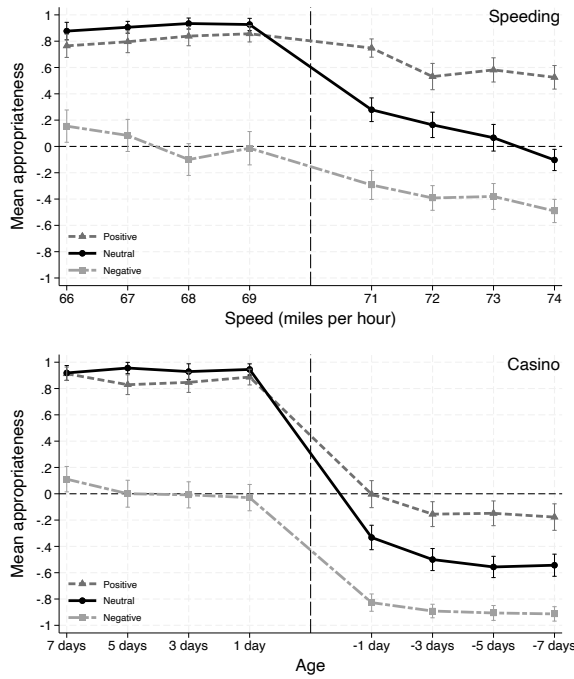


FIGURE 1. THE NORM FUNCTION: AGE OF CONSENT

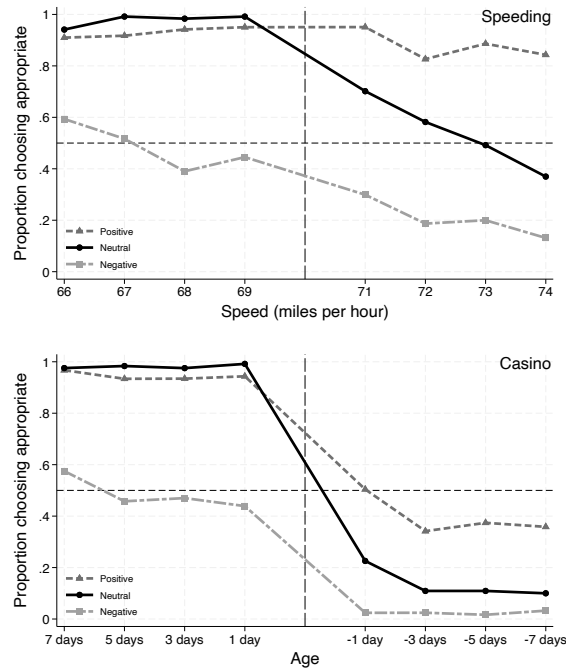
Notes: Figure 1 Panel A presents the average appropriateness rating and 95%-confidence intervals for the behavior at various distances from a legal threshold (1 = very appropriate, -1 = very inappropriate). Panel B presents the proportion of participants rating the behavior as either very appropriate or somewhat appropriate. The black norm function depicts the benchmark condition (i.e., 16.5-years-old male sexual partner), whereas the dashed gray norm functions depict the conditions with reduced normative ambiguity (i.e., 28 and 40-year-old male sexual partner). The dashed black line on the x-axis indicates the position of the legal threshold. Behaviors to the left of the threshold are legal, behaviors to the right are illegal.

Similarly, in *Speeding* and *Casino*, the expressive power of law diminishes when more normatively relevant information is included. In *Speeding*, which involves risky behavior, appropriateness ratings dropped by 0.65 units, and the appropriateness ratio dropped by 29 percentage points, right around the legal threshold in the benchmark condition, which did not include background details on driving conditions. These differences decreased to 0.28 units and 15 percentage points, when additional normatively relevant negative information was added, and to 0.11 units, and -0.04 percentage points, when normatively relevant positive information was added.

In *Casino*, where a legal age limit is imposed on a legitimate economic activity, the expressive power of law also diminishes as more normatively relevant information is added. Specifically, there is a drop of 1.3 units and 77 percentage points right around the legal threshold in the benchmark condition. When background information on the young patron is provided, the difference decreases to between 0.80 and 0.89 units, and to between 41 to 44 percentage points (with the addition of negative and positive information accordingly).



A. Appropriateness Rating

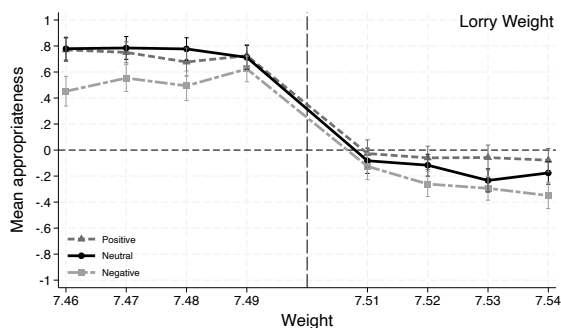


B. Appropriateness Ratio

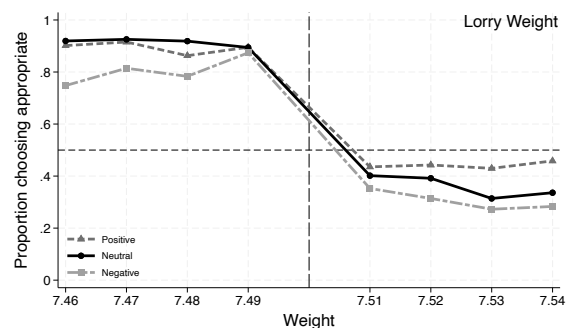
FIGURE 2. THE NORM FUNCTION: SPEEDING & CASINO

Notes: Figure 2 Panel A presents the average appropriateness rating and 95%-confidence intervals for the behaviors at various distances from a legal threshold (1 = very appropriate, -1 = very inappropriate). Panel B presents the proportion of participants rating the behavior as either very appropriate or somewhat appropriate. The black norm function depicts the benchmark condition, whereas the dashed gray norm functions depict the conditions with added normatively relevant positive and negative information (respectively). The dashed black line on the x-axis indicates the position of the legal threshold. Behaviors to the left of the threshold are legal, behaviors to the right are illegal.

The impact of contextual information on the expressive power of law is less pronounced in *Lorry Weight*. In this vignette, there is a drop of 0.79 units and 49 percentage points right around the legal threshold in the benchmark condition. When normatively relevant information is provided, the drop was of between 0.70 units and 46 percentage points (positive information) and 0.75 units and 52 percentage points (negative information).



A. Appropriateness Rating



B. Appropriateness Ratio

FIGURE 3. THE NORM FUNCTION: LORRY WEIGHT

Notes: Figure 3 Panel A presents the average appropriateness rating and 95%-confidence intervals for the behavior at various distances from a legal threshold (1 = very appropriate, -1 = very inappropriate). Panel B presents the proportion of participants rating the behavior as either very appropriate or somewhat appropriate. The black norm function depicts the benchmark condition, whereas the dashed gray norm functions depict the conditions with added normatively relevant positive and negative information (respectively). The dashed black line on the x-axis indicates the position of the legal threshold. Behaviors to the left of the threshold are legal, behaviors to the right are illegal.

To rule out the possibility that the interaction we detect in *Casino* and *Speeding* might be due to the extended length of the vignettes rather than the normative nature of the added information, we ran a follow up experiment ($N = 262$). In this experiment participants were randomly assigned to one of two conditions: – the same benchmark condition as in the main experiment, and a “placebo” condition that included more details but such that are normatively neutral. In *Casino* these details included things such as a description of the clothing worn by the person waiting in line, and in *Speeding* they included a description of a stop at a petrol station in which the driver bought a few grocery items. As is evident from Figure 4, the norms functions for the two conditions are practically identical. When the additional information was not normatively meaningful, participants rated the different scenarios similarly, with a similar expressive impact of crossing the threshold from legal to illegal behavior. A complete description of the follow up experiment is available in Appendix B.

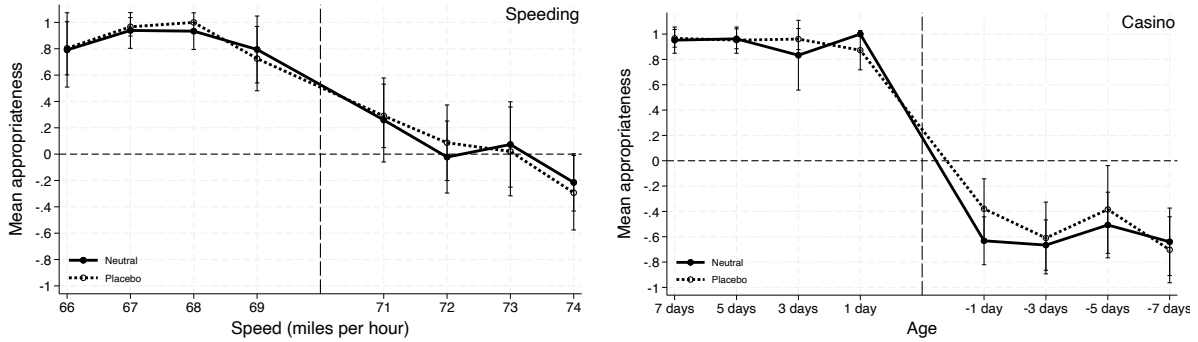


FIGURE 4. THE NORM FUNCTION: SPEEDING & CASINO, PLACEBO TEST

Notes: Figure 4 presents the average appropriateness rating and 95%-confidence intervals for the behaviors at various distances from a legal threshold (1 = very appropriate, -1 = very inappropriate). The solid black norm function depicts the benchmark condition, whereas the dotted norm function depicts the placebo condition with added normatively irrelevant information. The dashed black line on the x-axis indicates the position of the legal threshold. Behaviors to the left of the threshold are legal, behaviors to the right are illegal.

We formally test for differences in these discontinuities using OLS regression analysis.¹⁴

$$rating_{i,v} = \beta_0 + \beta_1^c clarity_v + \beta_2 illegal_v + \beta_3^c clarity_v \times illegal_v + \beta_4 dist_v + \beta_5^c clarity_v \times dist_v + \beta_6 illegal_v \times dist_v + \beta_7^c clarity_v \times illegal_v \times dist_v + \varepsilon.$$

The dependent variable, $rating_{i,v}$, is the social appropriateness rating subject i assigns to a behavior in vignette v . Variables indexed v are ones that we vary experimentally across conditions: $clarity_v$ is the level of normative clarity of the described behavior. The benchmark condition is the skeletal scenario, which is compared to the two more normatively detailed

¹⁴ Because not all respondents answered all the demographic questions at the end of the survey, we present here the results for the full sample with no controls. The results are robust to the inclusion of subject-level controls (gender, age, income level, and local region).

scenarios. The indicator variable *illegal_v* equals one if the behavior is illegal and zero otherwise. The variable *dist_v* measures the distance from the legal threshold. These three variables and their interactions allow us to capture the full variation across vignettes in a regression discontinuity style, where β_2 measures the discontinuity at the legal threshold for the benchmark condition, and β_3 , our coefficient of interest, measures the difference in discontinuity at the legal threshold for each of the normatively clearer conditions relative to the benchmark condition (that is, for each of the normatively clearer conditions, the discontinuity at the threshold is captured by the combination of $\beta_2 + \beta_3^c$).

The results are reported in Table 1. The regressions confirm that the law exerts an expressive power and systematically impacts the perceived social norms in all the conditions that were relatively ambiguous. Our estimates of β_2 are always negative and statistically significant (β_2 ranges from -0.54 to -1.26), indicating systematic discontinuities in the norm function around the legal threshold. The regressions also confirm that the addition of normatively relevant information attenuates the expressive power of law. In all vignettes, the estimates of β_3 are always positive, and run in the opposite direction to the general effect of illegality (β_2). That is, the discontinuity in the norm function around the legal threshold is smaller for conditions that include additional normatively relevant information in comparison to the benchmark condition.

In *Age of Consent*, the expressive effect of illegality decreases as the age of the adult sexual partner increases. The impact of crossing the legal threshold (i.e., the age of consent) on the appropriateness rating decreases by almost 60%, from 1.08 ($\beta_2 = -1.078$, $p < .001$) when the adult partner is 16.5 years old, to 0.43 ($\beta_3^{28} = 0.638$, $p < .001$) when the adult partner is 28 years old, to 0.41 ($\beta_3^{40} = 0.673$, $p < .001$) when the adult partner is 40 years old. Note that these results support our main hypothesis that moral clarity moderates the effect of legality. However, there was no meaningful difference in the expressive effect of illegality across the conditions that described adult partners that were 28 or 40 years old ($p = 0.79$), with both viewed similarly negatively in comparison to the benchmark condition describing a 16.5-year-old partner.

In *Speeding*, the impact of passing the legal speed limit on the appropriateness rating decreases from 0.54 ($\beta_2 = -0.544$, $p < .001$) in the benchmark condition, to 0.14 ($\beta_3^{good} = 0.402$, $p < .001$) when good driving conditions are described, 26% of the original impact, and to merely 0.1 ($\beta_3^{bad} = 0.442$, $p < .001$), 19% of the original impact, when driving conditions are bad. Furthermore, in both scenarios with added information, the impact of passing the legal speed limit on the appropriateness rating was no longer statistically distinguishable from zero (joint test for $\beta_2 + \beta_3 = 0$: $p = 0.2$ in the negative information condition and $p = 0.07$ in the positive condition).

In *Casino*, the impact of the patron being a minor on the appropriateness rating decreases from 1.26 ($\beta_2 = -1.259$, $p < .001$) in the benchmark condition, to 0.85 ($\beta_3^{good} = 0.413$, $p < .001$), 67% of the original impact, when positive information is added, to 0.73 ($\beta_3^{bad} = 0.531$, $p < .001$), 58% of the original impact, when negative information is added.

Finally, *Lorry Weight*, while the effects are not statistically significant, they are all in the predicted direction. The impact of overloading the lorry on the appropriateness rating decreases from 0.76 ($\beta_2 = -0.7$, $p < .001$) in the benchmark condition, to 0.73 ($\beta_3^{bad} = 0.039$, $p = 0.74$)

when negative information is added, to 0.7 ($\beta_3^{good} = 0.068, p = 0.57$), 92% of the original impact, when positive information is added.

TABLE 1. OLS REGRESSIONS

	(1) Age of Consent	(2) Speeding	(3) Casino	(4) Lorry Weight
Clarity (C) ¹ , β_1^c = 40 / negative	-1.119*** (0.076)	-1.098*** (0.080)	-1.039*** (0.068)	-0.067 (0.083)
= 28 / positive	-1.146*** (0.076)	-0.062 (0.080)	-0.096 (0.068)	-0.033 (0.083)
Illegal = 1 (I), β_2	-1.078*** (0.076)	-0.544*** (0.080)	-1.259*** (0.068)	-0.764*** (0.084)
I x C, β_3^c I x 40 / negative	0.673*** (0.108)	0.442*** (0.113)	0.531*** (0.097)	0.039 (0.118)
I x 28 / positive	0.645*** (0.108)	0.402*** (0.113)	0.413*** (0.097)	0.068 (0.118)
Distance (D), β_4	-0.021 (0.020)	-0.018 (0.021)	-0.005 (0.018)	0.021 (0.021)
D x C, β_5^c D x 40 / negative	0.002 (0.028)	0.087** (0.029)	0.048 (0.025)	-0.066* (0.030)
D x 28 / positive	0.048 (0.028)	-0.014 (0.029)	0.011 (0.025)	-0.000 (0.030)
I x D, β_6	0.067* (0.028)	0.142*** (0.029)	0.075** (0.025)	0.019 (0.030)
I x D x C, β_7^c I x D x 40 / negative	-0.041 (0.040)	-0.153*** (0.041)	-0.090* (0.035)	0.097* (0.043)
I x D x 28 / positive	-0.101* (0.040)	-0.048 (0.041)	-0.029 (0.035)	-0.025 (0.043)
Constant	0.600*** (0.053)	0.956*** (0.057)	0.950*** (0.048)	0.712*** (0.058)
Observations	2,909	2,911	2,912	2,913
R-squared	0.521	0.465	0.702	0.396

Notes: The dependent variable is the evaluation of appropriateness of the behavior described in a vignette. Robust standard errors in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

¹ The clarity manipulation for Column (1) is whether the adult partner was 28 or 40 years old. The clarity manipulation for Columns (2)–(4) is whether the vignette described negative or positive circumstances surrounding the behavior.

5. Discussion

In a series of four experimental vignettes we examined the degree to which law alone can alter perceived social norms. Using a two-dimensional framework, we manipulated both the behavior being evaluated around a legal threshold and the normative clarity of the scenario. This design allowed us to isolate (under specified and arguably reasonable assumptions) the causal effect of law on perceived social norms, and to measure its sensitivity to additional normatively relevant information.

The results confirm that the law has an expressive power. In all four benchmark conditions with the greatest normative ambiguity, we identified a significant discontinuity in the perceived social norm right around the legal threshold. A minuscule deviation in behavior that crosses the legal threshold leads to a substantially larger decrease in the perceived appropriateness of the act compared to deviations in behavior of a similar magnitude that are not around the legal threshold. This finding replicates earlier results by Lane et al. (2023) and Goerges et al. (2023).

However, our findings also expose the limits of the expressive power of law. All four vignettes showed a connection between normative equivocality and law's ability to change perceived social norms. In *Casino*, *Speeding*, and *Age of Consent*, the law's expressive power diminished significantly in conditions with clearer normative information compared to the benchmark condition. Notably, this effect holds for both positive and negative information: additional positive information can shift social norms toward illegal activities, making them seem more socially appropriate, while additional negative information can shift social norms toward legal activities, making them seem less socially appropriate. The results in *Lorry Weight* were in the same direction, but smaller in magnitude and not statistically significant. These findings support the hypothesis that law can shift perceived social norms, but with qualifications. In settings in which people find it complicated to assess the appropriateness of an act, the law serves as a normative compass that helps them navigate the normative uncertainty that they face. Yet as people are provided with additional normatively relevant information, the law's ability to shift people's views on social appropriateness is curtailed.

Identifying the impact of normatively relevant information on the expressive power of law is particularly important given the inability of existing studies to identify factors moderating this power. Goerges et al. (2023) use a similar framework to the one employed in this paper to examine whether race or gender interact with the expressive power of law—with null results. Lane et al. (2023) introduce into some of their vignettes alternative numeric thresholds promoted by advocacy groups, experts, or public polls, but these nonlegal thresholds, for the most part, had little to no impact on the perceived social norm and on the expressive effect of the legal threshold in the context in which they operated. The contrast between these null findings regarding other sources of information and the interaction identified in our experiment underscores the special role of normative ambiguity vis-à-vis the expressive power of law.

While our design does not allow us to draw any clear inferences across vignettes, the results are indicative that the interaction between law and norms may differ across domains. Significant interactions were detected in *Age of Consent*, *Casino*, and *Speeding*, but the interaction was not significant in *Lorry Weight*. This difference may be attributed to a subject's familiarity with the situations depicted in the first three vignettes: age of consent is a salient

legal topic, driving is a common activity, and legal age limits are ubiquitous (e.g., cigarettes, alcohol, tattoos, video games). Thus, it is likely that the conditions with additional normative information could more easily operationalize subjects' preexisting views on the governing social norms, and consequently the role of the law in assessing the social norm decreased in a meaningful way. This is less so in *Lorry Weight*, which depicts a professional situation that was probably unfamiliar to most participants. Apparently, in such an unfamiliar professional context, participants probably did not have a clear view regarding the governing social norm, and were less able to evaluate the normative implications of changes to the weight of the load on safety outcomes. Consequently, lacking the ability to fully appreciate the normative implications, subjects exhibited a more deferential stance toward the normative role of law. Alternatively, some subjects might have viewed the legal rule in *Lorry Weight* as focused on preventing damage to roads from excessively heavy vehicles. If this is the case, the additional information provided in the experimental vignettes might have not been viewed as normatively relevant from their perspective.

The reported results have some limitations that should be openly acknowledged. A general concern with all experimental studies relates to their external validity (Engel 2014). It is possible that judgments elicited in an online experimental survey do not reflect the complex realities of real-world social norms. Nonetheless, our design attempted to minimize this concern as much as possible. Participants were asked to state their beliefs regarding the prevailing social norm, and were incentivized to reveal their true assessment. Additionally, the experimental vignettes described real-world legal examples, and the design replicated results across several distinct contexts within a single experiment. That said, as is the case in many other legal settings, a better understanding of how the law functions can be achieved by using a wide range of empirical methods.

Another limitation relates to the ability to generalize our findings to other jurisdictions. Even if our results accurately document the expressive power of law and its qualification with respect to our subject pool, one could not confidently extrapolate them to other societies as the meta-norm of obeying the law might differ across jurisdictions. Future studies should aim to fill this gap and explore whether some societies are more inclined to blindly obey the law than others.

An additional possible concern is that participants in the study merely coordinated around the legal threshold by classifying legal actions as appropriate and illegal actions as inappropriate, even if that is not how they view the actual social norm. The results, however, suggest that this is unlikely. There are meaningful variations in the way people evaluate different behaviors. Participants exhibited sensitivity to additional normatively relevant facts, and shifted their assessment of appropriateness upward and downward in response to these facts. Additionally, in some vignettes, participants viewed *legal* actions as socially *inappropriate*, while in other vignettes they viewed *illegal* actions as socially *appropriate*. This was especially pronounced in *Age of Consent*, where participants viewed all factual scenarios involving a 28- or 40-year-old partner as socially inappropriate, and in *Speeding*, where participants viewed all factual scenarios in the positive condition as socially appropriate.

We also acknowledge the potential limits of our dependent variable, which relies on a four-point scale. While this scale is commonly used for its simplicity, it also restricts respondents' ability to express more nuanced or extreme views. Consequently, one cannot rule

out the possibility that at least some results reflect ceiling or floor effects. That said, in some cases—most visibly in the negative version of *Speeding*—the results are not constrained by a ceiling or a floor. Future studies could further explore this issue.

A final concern stems from our identification strategy. While this strategy allows us to draw causal inferences in the specific context we study, it also dictates the type of laws that we could incorporate into the survey. More specifically, by its very nature, the design employed in this study is limited to settings in which the law functions through numeric thresholds. One might speculate that legal prohibitions or legal mandates that do not entail a numeric threshold (e.g., designating a drug as illegal, requiring face masks) might impact perceived social norms differently from thresholds.¹⁵ Relatedly, our identification strategy is unfit to explore the role of other types of legislation that might have an expressive power such as legislation granting rights to different minority groups (e.g., legalization of same-sex marriage) or laws that emphasize the majority's values (e.g., language laws). With these limitations in mind, we turn to discuss some of the general implications of our study.

At the most basic level, the results highlight the ability of policymakers to shape social norms using law. Our findings suggest that law can shape the perceived social norm, as merely designating a certain behavior as illegal causes people to perceive it as less socially appropriate. Consequently, law might be able to impact behavior irrespective of any formal enforcement. Additionally, our results suggest that the expressive power of law is not a uniform phenomenon. With respect to behaviors that people do not hold clear views regarding their appropriateness, law, *qua law*, might be able to influence social norms. But when law deals with behaviors that people hold clear normative convictions about, law's ability to sway peoples' views regarding appropriateness is significantly curtailed. Notably, law's expressive power varies not only across types of conduct but is also sensitive to the detailed factual circumstances surrounding any conduct. This suggests that lawmakers should not rely on an expectation of blind or even consistent compliance with the law.

The findings of this study can also shed a new light on several documented phenomena in the social norms discourse. Conceptually, the compliance literature has dedicated significant attention to the ability of formal institutions such as law or markets to crowd out intrinsic motivation (for reviews, see Frey and Jegen 2001; Underhill 2016). This body of work has shown that the introduction of formal legal regulation (for example, through penalties or mandates) might crowd out people's existing motivation to behave prosocially (e.g., Gneezy and Rustichini 2000; Kim 2021). Our results point to an opposite process in which internal convictions crowd out the law. As people gather information and normative guidance from other sources, the role of the law in shaping their beliefs about the governing social norm diminishes.

In modern societies, there is a wide range of institutional actors—from political leaders and religious authorities to traditional and social media outlets—who could function as “norm entrepreneurs” and impact people's normative judgments (Pozen 2008). When, for example,

¹⁵ Decisions made with respect to a numeric scale might be impacted by the anchoring effect, and existing studies show that salient legal numbers can function as anchors and impact peoples' choices (Feldman, Schurr and Teichman 2016). This highlights another theoretical mechanism that might underly the expressive power of law. Notably, however, Lane et al (2023: 1276–81) demonstrate that when subjects are provided with a competing salient number (e.g., a new threshold advocated for by experts), that competing number does not sway people's judgments the way the legal threshold does.

countries around the world enacted legal restrictions applying to routine human behaviors during the COVID-19 pandemic, soon after many players in the public sphere entered the compliance arena, and began to influence people's decisions (e.g., DeFranza et al. 2021; Yassin et al. 2021; Simonov et al. 2022; Painter and Qiu 2020). Understanding the interaction between the expressive power of law and normative clarity can help explain why in domains in which other powerful social institutions create competing norms, people's tendency to blindly follow the law may diminish.

Aside from these external factors, the expressive power of law might also be influenced by internal motivational factors. Particularly, motivated reasoning and the human tendency to seek information and interpret reality in a self-serving manner can create the moral wiggle room through which people justify selfish decisions and unethical behavior (e.g., Dana et al. 2007; Feldman and Teichman 2009; Feldman 2018; Zamir and Teichman 2018). This phenomenon could also apply to the meta-norm of legal compliance. People who wish to disobey a legal rule might selectively seek supporting information (either prescriptive, such as possible justifications, or descriptive, such as anecdotal evidence of noncompliance). This added information may influence their assessment of the prevailing social norm through two channels. First, as the literature has established, selectively chosen information may impact the assessment of the behavior itself, and thus provide justifications for selfish choices (i.e., "driving at 73 miles per hour is reasonable"). Second, our results suggest that by selectively choosing information people may also create normative clarity that is aligned with their self-interest. This normative clarity might then diminish the expressive power of the law regulating the behavior (i.e., "the 70 mile per hour speed limit is irrelevant").

The findings also contribute to our understanding of shaming sanctions in general (Kahan 1996; Kahan and Posner 1999) and to the function of sex offender registration and notification laws in particular (Teichman 2005). Legal reputational tools, such as criminal records or sex offender registration and notification policies, often function in a crude way. They convey very general information (i.e., a conviction), without providing a granular account of all mitigating and aggravating circumstances. Consequently, the social response by remote third parties might not reflect their true judgment of the transgressor's behavior, had they been aware of all of the relevant normative information.¹⁶

The fact that law conveys incomplete information to remote parties has led to a push to limit the dissemination of information by the legal system. The issue of underaged sex studied in this paper is an illustrative case in point. In California, for example, the state's Sex Offender Registration Act (Cal. Pen. Code §290(c)(2)), grants judges discretion over the registration requirement in cases involving some types of non-forcible sexual contact with an underaged partner if the age gap between the two partners is below ten years. Such a mechanism allows the law to balance between legal sanctions and social norms, in an attempt to achieve a just response to a transgression that requires careful examination of all facts and not just the legal threshold.

Finally, our results also highlight a potential temporal aspect to the expressive function of law (e.g., Barak-Corren, Feldman, and Gidron 2018, 2022). According to the goal-framing theory of social norm compliance (Lindenberg and Steg 2007; Lindenberg, Six and Keizer 2021), adherence to norms is a dynamic process stemming from three overarching goals:

¹⁶ This observation is an integral part of the model presented by Lane et al (2023: 1257).

hedonic, gain, and normative. The hedonic goal refers to people's pursuit of immediate personal gratification, whereas the gain goal refers to people's attempts to advance their long-term welfare (Lindenberg, Six, and Keizer 2021). The normative goal is most closely related to the expressive power of law, referring to people's desire to act appropriately and do what they believe they ought to do (id.). Notably, research has suggested that over time the normative goal tends to yield to the competing hedonic and gain goals (id: 434). Our findings offer a potential explanation for this gradual shift: because normative clarity attenuates law's expressive power, this power might change over time as people become more informed about the regulated behavior. When faced with a new situation about which they have little information, people might be more "puzzled" and voluntarily take guidance from the law. Over time, however, as they gain personal experience or are exposed to additional information from other sources, people may develop an independent view of the regulated behavior. Compliance with public health regulation during the COVID-19 pandemic may serve as a case in point. Research has documented that as the pandemic progressed, there was a decline in adherence to the rules, and the emergence of a more differentiated compliance—with personal variables (e.g., age and risk) having greater impact on people's decisions (Six et al. 2023).

6. Conclusion

The debate over the expressive power of law has been heated. While some vigorously defend the proposition that law, independent of any enforcement, can shift social norms and change behavior, others argue with equal zeal that this proposition is false. The empirical literature arising from this debate has focused on a dichotomous question: does law have an expressive power? The findings presented in this paper are not aligned with either of these camps, and show that the norm of legal compliance, like other social norms, is moderated by contextual factors. A law creating a speed limit might have an expressive power when drivers have little information regarding driving conditions, yet this expressive power might weaken as drivers become more informed of either adverse or favorable driving conditions. Thus, the findings suggest a more dynamic and nuanced concept of expressive law.

Future studies could utilize the framework introduced in this paper to measure how other factors impact the expressive power of law. For instance, researchers could explore whether this power is sensitive to the motivation driving the enactment of laws. A speed limit enacted to reduce carbon emissions might be viewed differently than a speed limit enacted to promote safety. Additionally, future research could analyze the expressive power of specific legal provisions more closely. Focusing on a single rule, such as the age of consent, would allow for a more granular examination of the factors impacting law's ability to alter social norms.

Finally, a more comprehensive understanding of the expressive power of law requires detailed examination of interpersonal differences (for previous studies documenting such differences, see, e.g., Barak-Corren, Feldman, and Gidron 2018, 2022; Burke and Sommers 2022; Cope and Crabtree 2020). The willingness of people to accept the law as a normative authority might differ based on an array of factors such as trust in institutions, prosocial attitudes, political affiliation, and the sub-communities people belong to. Our finding that normative clarity moderates the expressive effect of the law further suggests a differential impact based on preexisting moral convictions. People who hold strong moral convictions will

likely be less swayed by a legal reform or a recent court ruling. Moderates, on the other hand, will more plausibly be open to relying on the law for guidance. Future studies could utilize our experimental framework while focusing on relevant populations and oversampling certain groups.

The claim that law has an expressive power has profoundly impacted legal scholarship, transformed discussions across various legal fields, and informed concrete policy debates. However, many empirical questions still loom regarding the ability of law, *qua law*, to shift social norms. This Article has attempted to reorient this debate by focusing it on identifying contextual factors that moderate the law's expressive power. Specifically, the Article pinpointed one such moderating factor: normative clarity. This finding should be viewed as a first step in a long journey toward identifying the boundary conditions of the expressive power of law.

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Cases

Michael M. v. Superior Court., 450 U.S. 464 (1981).

Legislation

California Sex Offender Registration Act, codified: Cal. Pen. Code §290.

Proposed Legislation

Bill 187, Crime and Policing Bill, 2025. Available at: <https://bills.parliament.uk/bills/3938>.

Appendix A: Main Experiment – Additional Descriptive Statistics and Robustness Tests

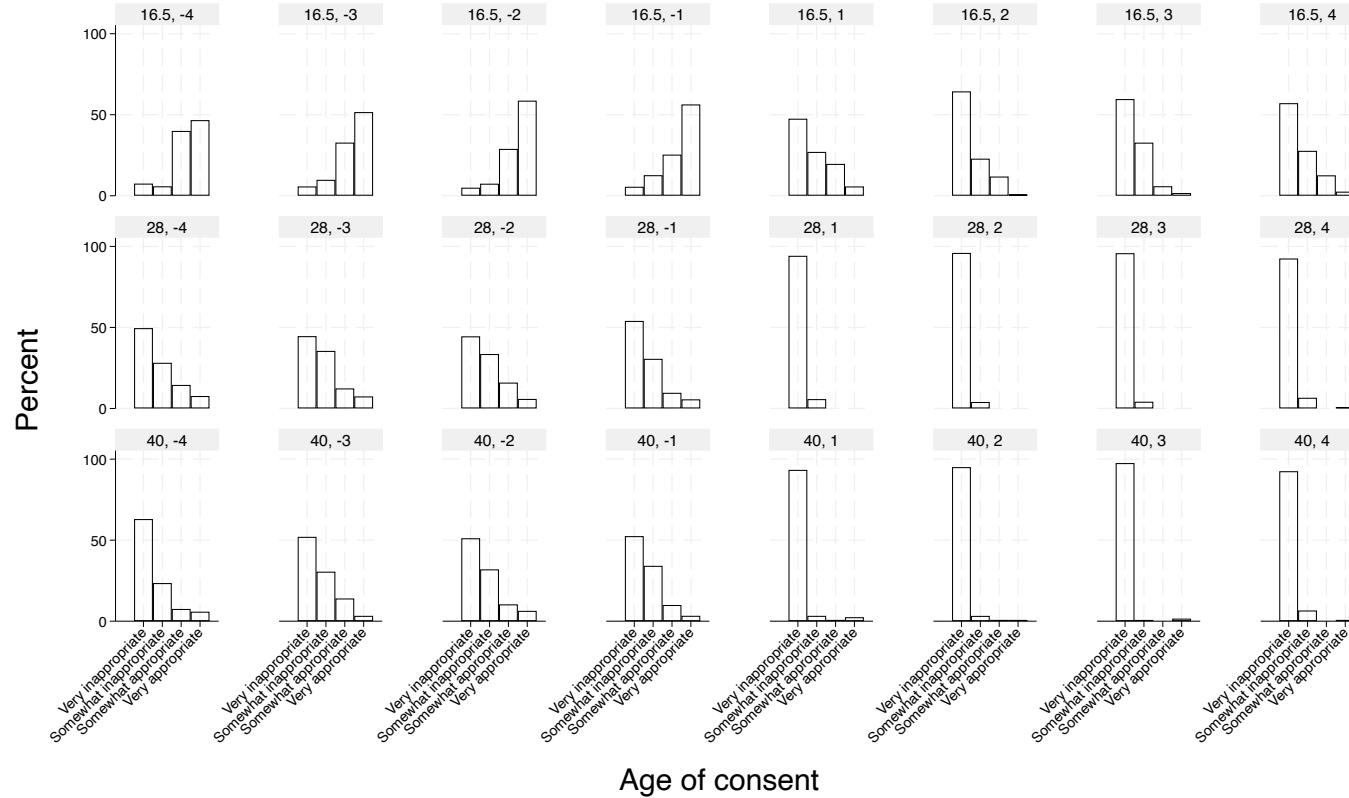


FIGURE A1. DISTRIBUTION OF SOCIAL APPROPRIATENESS RATINGS: AGE OF CONSENT

Notes: Figure A1 represents the distribution of social appropriateness ratings in all 24 treatments of *Age of Consent*. The first dimension of the experiment manipulates normative ambiguity by setting the age of the male partner to be 16.5, 28 or 40. The second dimension manipulates the distance from the legal threshold (i.e., age of consent) and sets it as +/- 1, 2, 3, or 4 (positive distance indicating illegality). The four rating options are: very appropriate, somewhat appropriate, somewhat inappropriate, and very inappropriate.

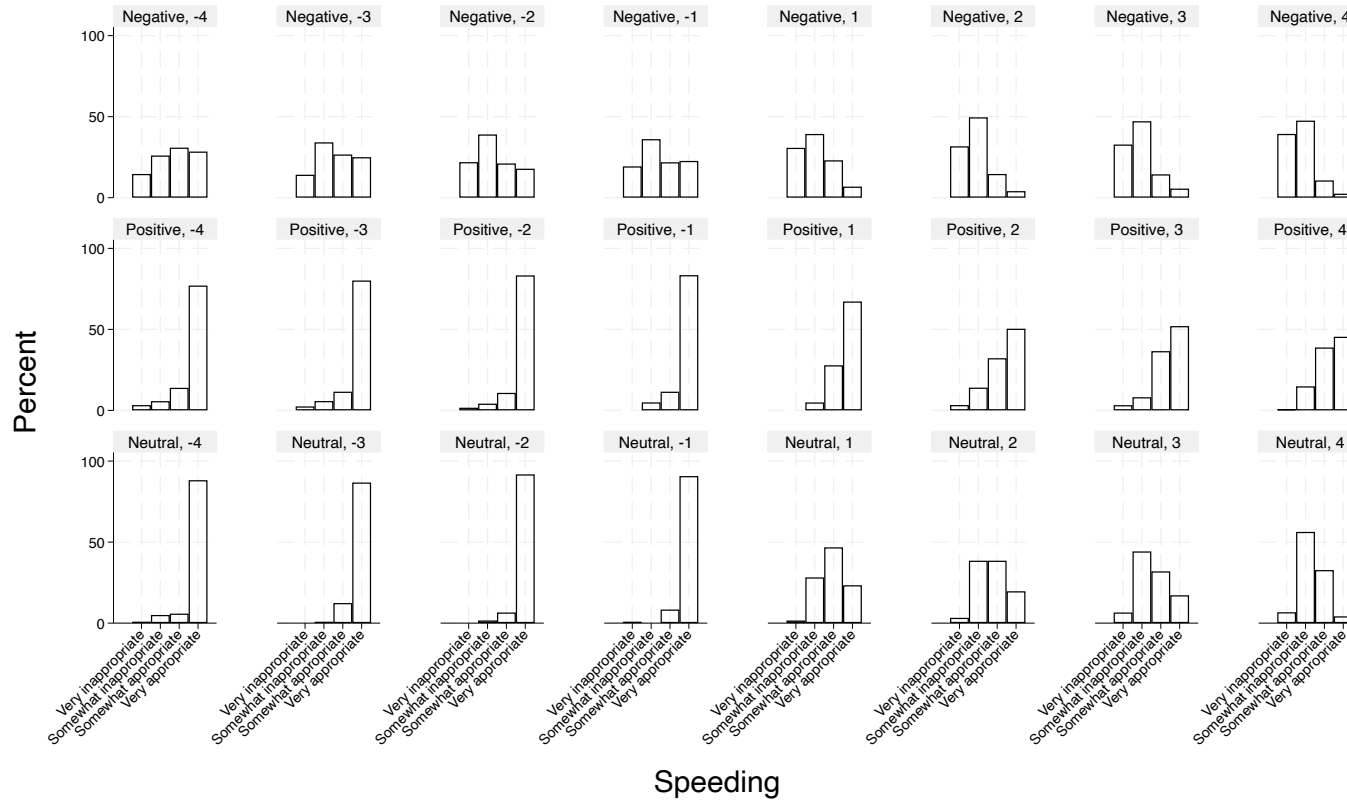


FIGURE A2. DISTRIBUTION OF SOCIAL APPROPRIATENESS RATINGS: SPEEDING

Notes: Figure A2 represents the distribution of social appropriateness ratings in all 24 treatments of *Speeding*. The first dimension of the experiment manipulates normative ambiguity by presenting limited information (neutral) or additional normatively relevant positive or negative information. The second dimension manipulates the distance from the legal threshold (i.e., the speed limit) and sets it as +/- 1, 2, 3, or 4 (positive distance indicating illegality). The four rating options are: very appropriate, somewhat appropriate, somewhat inappropriate, and very inappropriate.

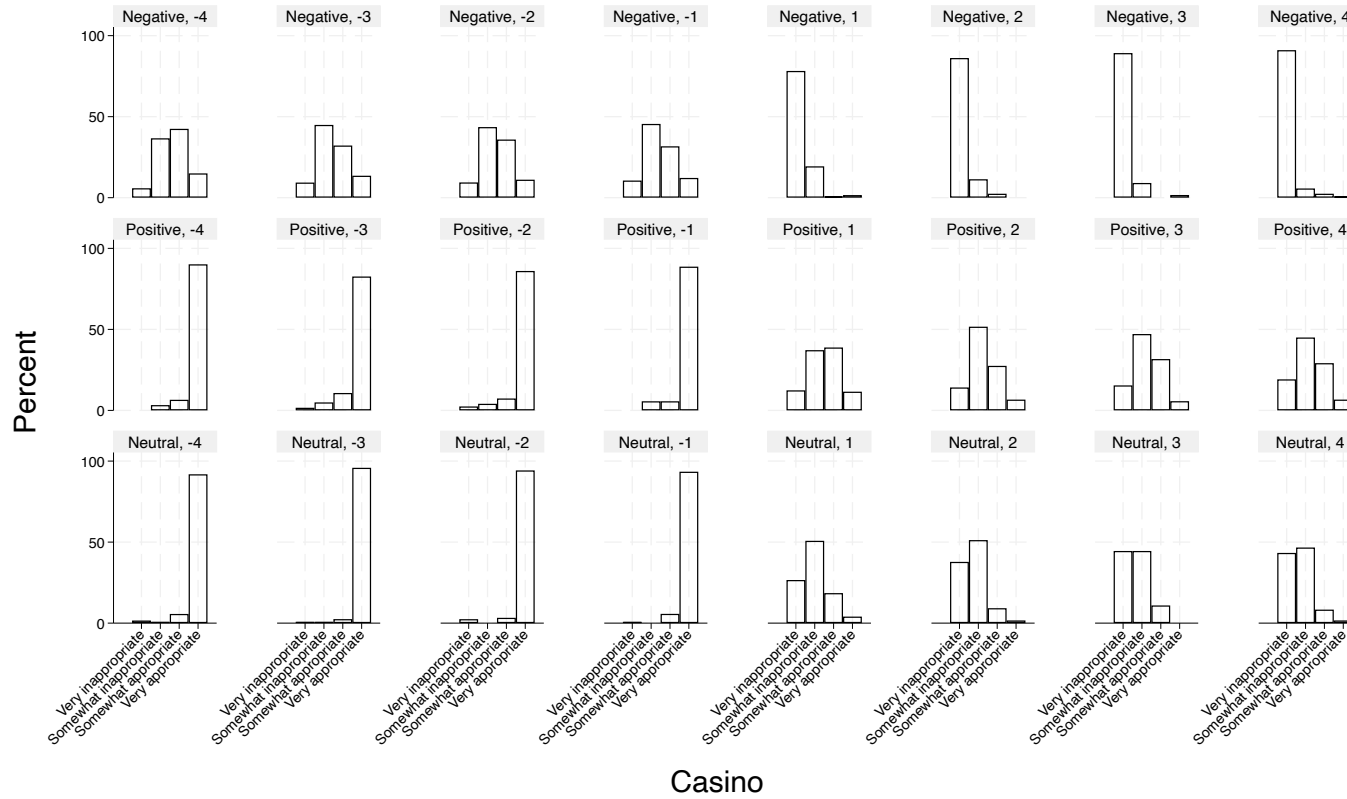


FIGURE A3. DISTRIBUTION OF SOCIAL APPROPRIATENESS RATINGS: CASINO

Notes: Figure A3 represents the distribution of social appropriateness ratings in all 24 treatments of *Casino*. The first dimension of the experiment manipulates normative ambiguity by presenting limited information (neutral) or additional normatively relevant positive or negative information. The second dimension manipulates the distance from the legal threshold (i.e., age limit) and sets it as +/- 1, 2, 3, or 4 (positive distance indicating illegality). The four rating options are: very appropriate, somewhat appropriate, somewhat inappropriate, and very inappropriate.

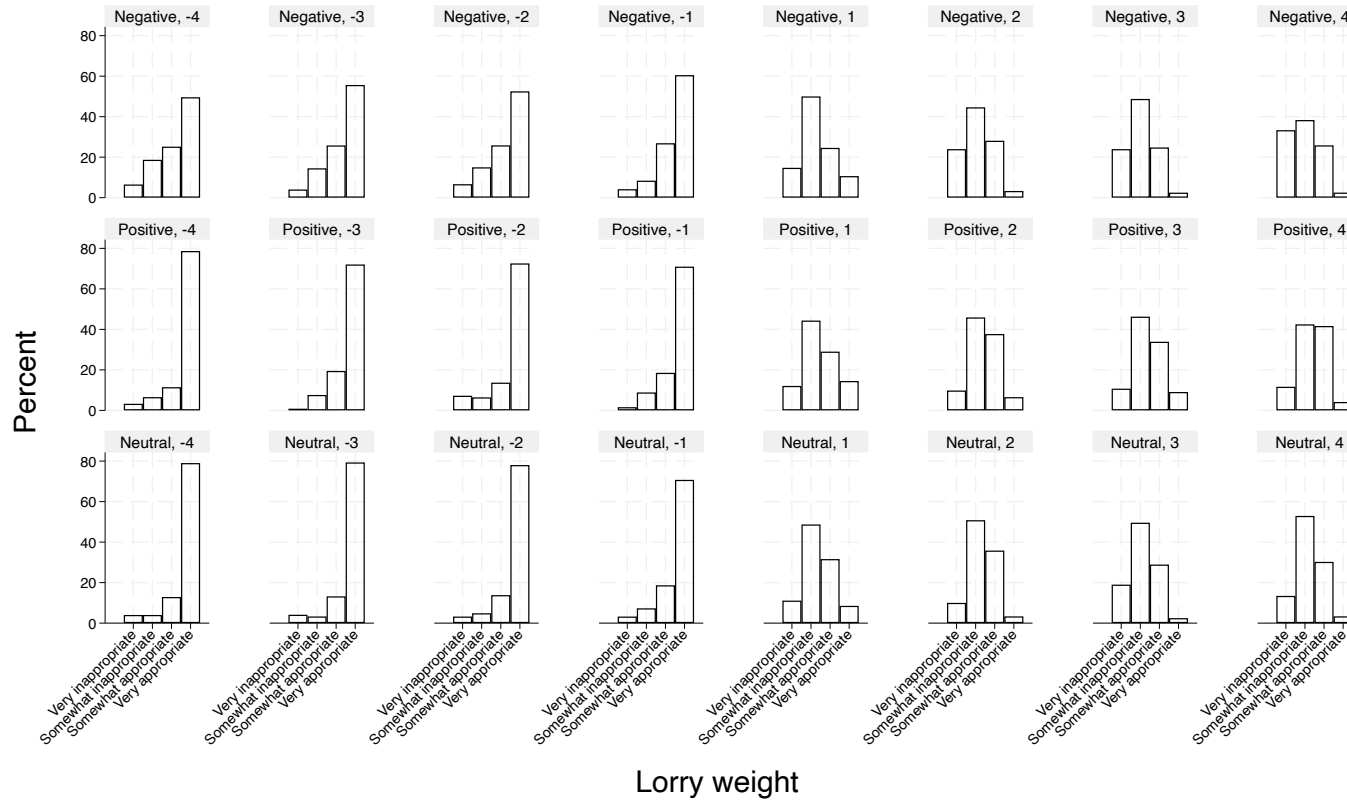


FIGURE A4. DISTRIBUTION OF SOCIAL APPROPRIATENESS RATINGS: LORRY WEIGHT

Notes: Figure A3 represents the distribution of social appropriateness ratings in all 24 treatments of *Lorry Weight*. The first dimension of the experiment manipulates normative ambiguity by presenting limited information (neutral) or additional normatively relevant positive or negative information. The second dimension manipulates the distance from the legal threshold (i.e., weight limit) and sets it as +/- 1, 2, 3, or 4 (positive distance indicating illegality). The four rating options are: very appropriate, somewhat appropriate, somewhat inappropriate, and very inappropriate.

TABLE A1. HETEROGENEITY ANALYSIS - BY PARTICIPANTS' GENDER

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Age of Consent		Speeding		Casino		Lorry Weight	
VARIABLES	Female	Male	Female	Male	Female	Male	Female	Male
Clarity (C) ¹ , β_1^c								
= 40 / negative	-1.127*** (0.100)	-1.122*** (0.113)	-1.127*** (0.112)	-1.043*** (0.116)	-1.201*** (0.094)	-0.896*** (0.100)	-0.248* (0.122)	0.096 (0.114)
= 28 / positive	-1.059*** (0.100)	-1.220*** (0.114)	-0.073 (0.112)	-0.059 (0.117)	-0.102 (0.093)	-0.094 (0.101)	0.054 (0.119)	-0.130 (0.114)
Illegal = 1 (I), β_2	-0.989*** (0.101)	-1.182*** (0.114)	-0.557*** (0.112)	-0.533*** (0.115)	-1.330*** (0.096)	-1.210*** (0.098)	-0.837*** (0.123)	-0.705*** (0.113)
I x C, β_3^c								
I x 40 / negative	0.682*** (0.145)	0.679*** (0.159)	0.443** (0.156)	0.445** (0.167)	0.649*** (0.135)	0.465*** (0.140)	0.367* (0.174)	-0.265+ (0.160)
I x 28 / positive	0.559*** (0.144)	0.715*** (0.160)	0.428** (0.159)	0.380* (0.163)	0.535*** (0.134)	0.337* (0.141)	-0.010 (0.172)	0.173 (0.160)
Distance (D), β_4	-0.005 (0.025)	0.053+ (0.030)	0.019 (0.030)	0.016 (0.029)	0.021 (0.025)	-0.009 (0.026)	-0.002 (0.031)	-0.039 (0.030)
D x C, β_5^c								
D x 40 / negative	0.019 (0.037)	-0.034 (0.042)	-0.085* (0.041)	-0.083* (0.042)	-0.104** (0.035)	-0.000 (0.036)	-0.006 (0.044)	0.125** (0.042)
D x 28 / positive	-0.007 (0.037)	-0.093* (0.042)	-0.008 (0.041)	0.033 (0.042)	-0.015 (0.034)	-0.008 (0.037)	0.011 (0.044)	-0.014 (0.041)
I x D, β_6	-0.043 (0.037)	-0.095* (0.042)	-0.144*** (0.041)	-0.136** (0.042)	-0.082* (0.035)	-0.062+ (0.036)	-0.021 (0.045)	-0.014 (0.041)
I x D x C, β_7^c								
I x D x 40 / negative	0.032 (0.053)	0.054 (0.059)	0.169** (0.057)	0.121* (0.060)	0.160** (0.050)	0.015 (0.051)	-0.067 (0.064)	-0.122* (0.058)
I x D x 28 / positive	0.070 (0.052)	0.136* (0.059)	0.068 (0.058)	0.035 (0.060)	-0.005 (0.048)	0.051 (0.052)	0.020 (0.063)	0.024 (0.058)
Constant	0.479*** (0.069)	0.730*** (0.081)	0.945*** (0.082)	0.963*** (0.080)	1.000*** (0.067)	0.903*** (0.070)	0.708*** (0.084)	0.718*** (0.081)
Observations	1,439	1,436	1,439	1,438	1,439	1,439	1,440	1,439
R-squared	0.545	0.514	0.486	0.444	0.722	0.683	0.372	0.440

Notes: The dependent variable is the evaluation of appropriateness of the behavior described in a vignette. Robust standard errors in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

¹ The clarity manipulation for Column (1) is whether the adult partner was 28 or 40 years old. The clarity manipulation for Columns (2)–(4) is whether the vignette described negative or positive circumstances surrounding the behavior.

TABLE A2. HETEROGENEITY ANALYSIS – BY PARTICIPANTS' AGE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Age of Consent		Speeding		Casino		Lorry Weight	
VARIABLES	Age ≤ 30	Age > 30	Age ≤ 30	Age > 30	Age ≤ 30	Age > 30	Age ≤ 30	Age > 30
Clarity (C) ¹ , β_1^c								
= 40 / negative	-1.144*** (0.150)	-1.140*** (0.088)	-0.820*** (0.158)	-1.195*** (0.093)	-1.252*** (0.137)	-0.972*** (0.079)	-0.185 (0.160)	-0.035 (0.098)
= 28 / positive	-1.098*** (0.139)	-1.172*** (0.090)	0.014 (0.161)	-0.087 (0.092)	-0.024 (0.137)	-0.117 (0.079)	-0.105 (0.154)	-0.009 (0.098)
Illegal = 1 (I), β_2	-0.933*** (0.143)	-1.131*** (0.089)	-0.464** (0.166)	-0.563*** (0.091)	-1.111*** (0.134)	-1.313*** (0.079)	-0.902*** (0.166)	-0.726*** (0.097)
I x C, β_3^c								
I x 40 / negative	0.547** (0.211)	0.741*** (0.125)	0.313 (0.231)	0.492*** (0.130)	0.708*** (0.188)	0.474*** (0.113)	0.313 (0.232)	-0.040 (0.137)
I x 28 / positive	0.567** (0.204)	0.676*** (0.126)	0.224 (0.233)	0.454*** (0.129)	0.106 (0.192)	0.521*** (0.112)	0.029 (0.225)	0.088 (0.138)
Distance (D), β_4	-0.037 (0.036)	0.043+ (0.023)	0.031 (0.040)	0.013 (0.024)	-0.000 (0.035)	0.007 (0.020)	0.031 (0.044)	-0.035 (0.025)
D x C, β_5^c								
D x 40 / negative	0.047 (0.055)	-0.028 (0.032)	-0.033 (0.057)	-0.105** (0.034)	-0.130** (0.050)	-0.021 (0.029)	-0.013 (0.060)	0.088* (0.035)
D x 28 / positive	0.060 (0.051)	-0.090** (0.033)	0.033 (0.058)	0.008 (0.034)	0.000 (0.049)	-0.013 (0.029)	-0.012 (0.059)	0.002 (0.035)
I x D, β_6	0.014 (0.052)	-0.100** (0.033)	-0.171** (0.059)	-0.134*** (0.034)	-0.097+ (0.050)	-0.066* (0.029)	-0.030 (0.062)	-0.018 (0.035)
I x D x C, β_7^c								
I x D x 40 / negative	0.013 (0.077)	0.062 (0.046)	0.060 (0.082)	0.184*** (0.048)	0.185** (0.069)	0.060 (0.041)	-0.093 (0.086)	-0.096+ (0.050)
I x D x 28 / positive	-0.034 (0.074)	0.155*** (0.046)	0.037 (0.084)	0.054 (0.047)	0.078 (0.071)	0.008 (0.041)	0.038 (0.084)	0.021 (0.050)
Constant	0.478*** (0.095)	0.650*** (0.064)	0.970*** (0.112)	0.950*** (0.066)	0.916*** (0.095)	0.962*** (0.056)	0.809*** (0.115)	0.684*** (0.068)
Observations	749	2,159	749	2,161	749	2,162	749	2,163
R-squared	0.568	0.517	0.412	0.488	0.708	0.702	0.378	0.405

Notes: The dependent variable is the evaluation of appropriateness of the behavior described in a vignette. Robust standard errors in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

¹ The clarity manipulation for Column (1) is whether the adult partner was 28 or 40 years old. The clarity manipulation for Columns (2)–(4) is whether the vignette described negative or positive circumstances surrounding the behavior.

Appendix B: Follow Up Experiment

1. Design and Procedure

As briefly described in the text, a follow up experiment was conducted for two purposes. First, to rule out the possibility that the interaction detected in *Casino* and *Speeding* is a mere artifact of the longer word count of the vignettes that included additional normatively relevant information. Second, to test the hypothesis that subjects will find the *Age of Consent* vignette with a lower age gap to be more normatively ambiguous.

The follow up experiment was an abbreviated version of the main experiment. Unless indicated otherwise, it utilized the same experimental procedure and used the same dependent variable – participants' judgment of social appropriateness on a four-point scale. The experiment included three experimental vignettes, and five filler vignettes that included no manipulations. Participants entered through a consent page, and then read a detailed explanation about the experiment and their payment. Participants were paid a flat fee of £1.5 for their participation, and an additional £1 bonus that could be earned if the answer given by the participant was the most common answer given to the question by all participants.

The vignettes appeared in three blocks. The first block included three filler vignettes that appeared in random order, and were meant to train participants before they moved onto the experimental vignettes. The second block included four vignettes that appeared in random order: *Casino*, *Speeding* and two filler vignettes. Finally, *Age of Consent* appeared at the end of experiment.

The *Casino* and *Speeding* vignettes employed a 2*8 design. The first dimension manipulated the distance to the legal threshold, using precisely the same design as in the main experiment. The second dimension manipulated the length of the vignette. The benchmark conditions in both vignettes included the same brief description of the scenario used in the main experiment. The placebo condition described the same scenario, but added to it normatively irrelevant information. In *Casino* the placebo treatment also noted that the person waiting in line was wearing blue jeans and a dark grey shirt as well as noting that she was standing in line with a friend. In *Speeding* the placebo treatment included additional information about a stop at a petrol station during which the driver entered a convenience store and bought some groceries.

Age of Consent included only two experimental treatments. Participants read a revised version of the vignette used in the main experiment that described a consensual sexual interaction between a 16-year-old girl and a man who was either 16.5 years old or 28 years old. Unlike the main experiment, the vignette in the follow up experiment did not make any reference to the legal age of consent, nor did it manipulate the age of the female sexual partner. This design was chosen to capture peoples' views on the social appropriateness of the situation irrespective of their views regarding obeying the law. By design, this vignette was placed at the end of the experiment to allow for follow up questions. Thus, participants were first asked their views regarding social appropriateness (like in the main experiment). Subsequently participants were asked how confident they are of their ability to predict the answers given by other participants in the experiment (on a 1–9 scale). After this, participants were asked to evaluate the social appropriateness of the scenario assuming that the man was the age that they

were not initially assigned to (i.e., those who were assigned to the 16.5 condition were now asked to evaluate the scenario when the man is 28 years old). Finally, participants were given a dichotomous question and asked whether they were more confident of their assessment of the version of the vignette involving a 16.5-year-old man, or the version in which the man is 28 years old. This design allowed us to measure participants confidence regarding the social norm both between subjects (comparing their answers to the scale question) and within subjects (using the dichotomous question). As noted, we hypothesized that participants will be more confident of their knowledge of the social norm when the age gap was larger and the man was 28 years old.

The experiment was conducted online using the Prolific platform. Participants were adult residents of the United Kingdom, with English as their first language. A total of 262 participants took part in the study (50 percent female), with an age representation of: 15.6 percent aged 18–24, 24 percent aged 25–34, 22.1 percent aged 35–44, 21 percent aged 45–54, 17.2 percent aged 55 and older. The pre-registered exclusion criteria from the follow up experiment were similar to those in the main experiment, and were: (1) labeled by Qualtrics as likely an algorithm; (2) labeled by Qualtrics as likely a duplicate, or registered with the same prolific ID more than once; (3) failed to answer correctly a post-experimental comprehension question; and (4) failed to evaluate correctly at least one of two filler vignettes that reflect clearly good or bad behavior (for example, subjects who judged the decision of a CEO to bribe a government official as “very appropriate” or “somewhat appropriate”). Overall, 58 participants were excluded from the study based on these criteria.

2. Results

Questions 1 and 3 measure social appropriateness depending on the age of the male sexual partner.

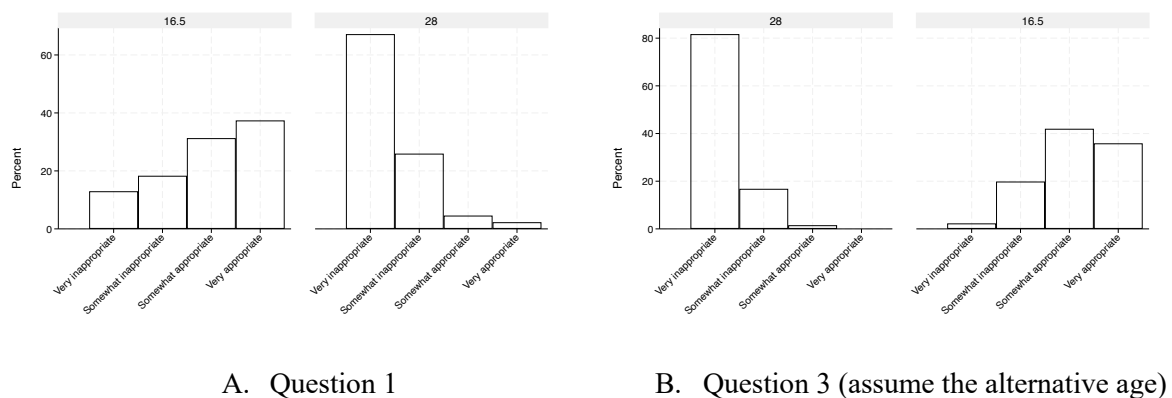


FIGURE B1. DISTRIBUTION OF APPROPRIATENESS RATINGS, AGE OF CONSENT

Notes: In the first question, average appropriateness ratings were 0.29 ($SD = 0.69$) when the partner was 16.5-years-old in comparison to -0.72 when the partner was 28-years-old ($SD = 0.46$) (t-test $p < 0.001$). In the third question, average appropriateness ratings were 0.41 ($SD = 0.53$) when the partner was assumed to be 16.5-years-old in comparison to -0.87 ($SD = 0.29$) when the partner was assumed to be 28-years-old (t-test $p < 0.001$).

Question 2 measures participant's confidence in the answer they provided to question 1 and was used to conduct the between-subjects analysis.

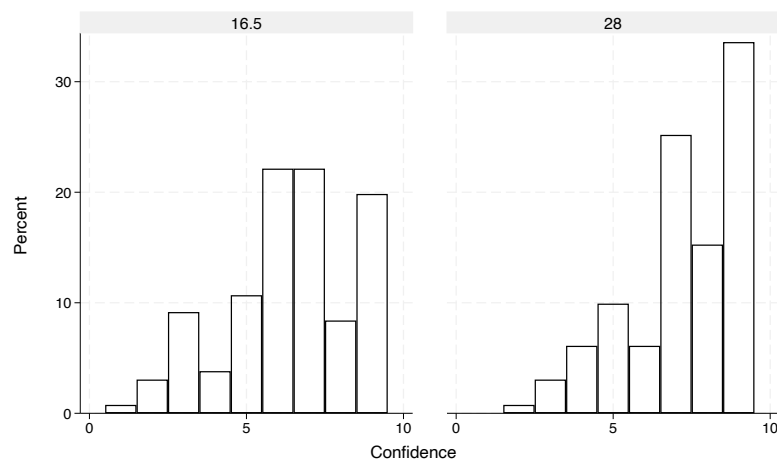


FIGURE B2. DISTRIBUTION OF CONFIDENCE RATINGS, AGE OF CONSENT (QUESTION 2)

Notes: In question 2, Average reported confidence of ability to predict the views of other participants was 7.22 when asked about the 28-years-old partner in comparison to only 6.37 when asked about the 16.5 years-old partner (t-test $p < 0.001$)

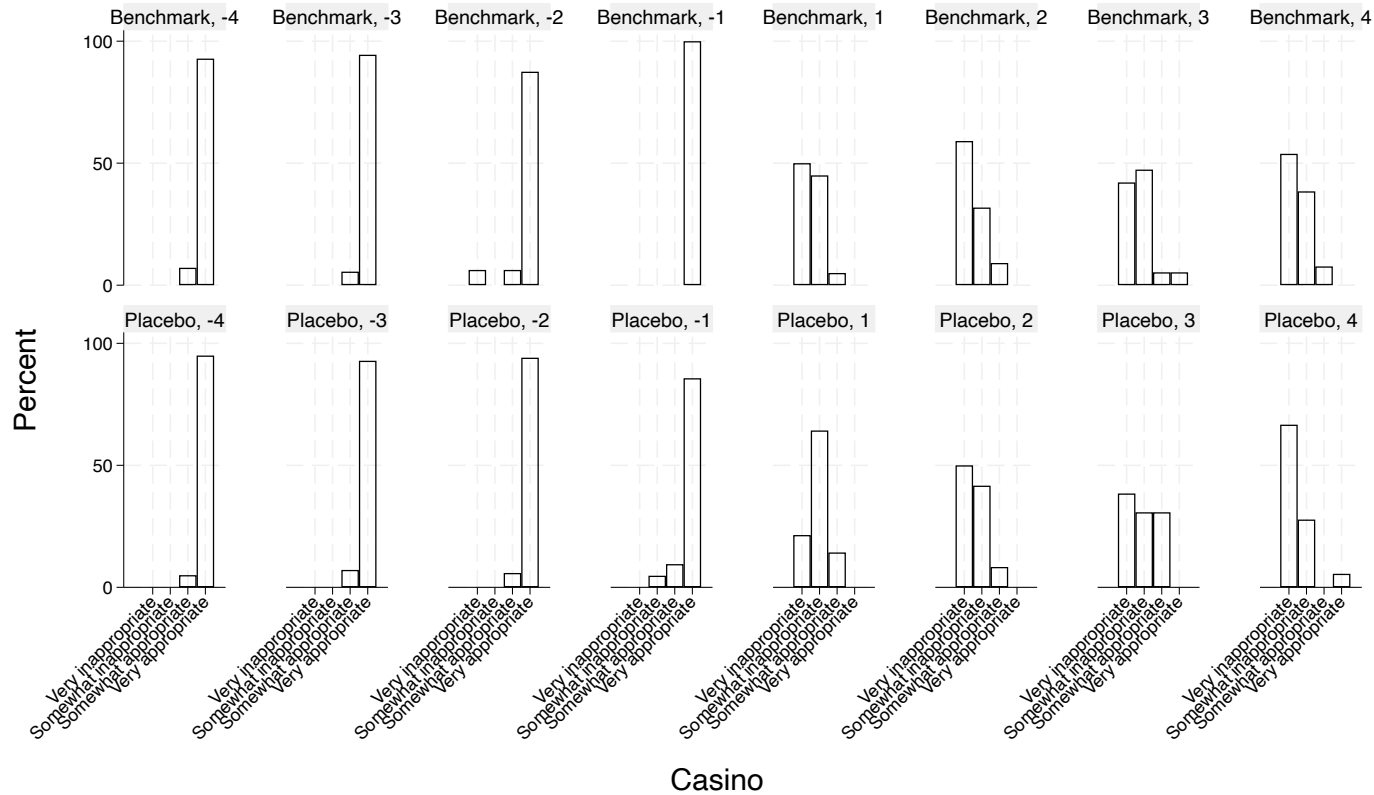


FIGURE B3. DISTRIBUTION OF SOCIAL APPROPRIATENESS RATINGS: CASINO

Notes: Figure B3 represents the distribution of social appropriateness ratings in all 16 treatments of *Casino* in the follow up experiment. The first dimension of the experiment manipulates vignette length by comparing the benchmark vignette with a placebo treatment that included additional normatively irrelevant information. The second dimension manipulates the distance from the legal threshold (i.e., age limit) and sets it as +/- 1, 2, 3, or 4 (positive distance indicating illegality). The four rating options are: very appropriate, somewhat appropriate, somewhat inappropriate, and very inappropriate.

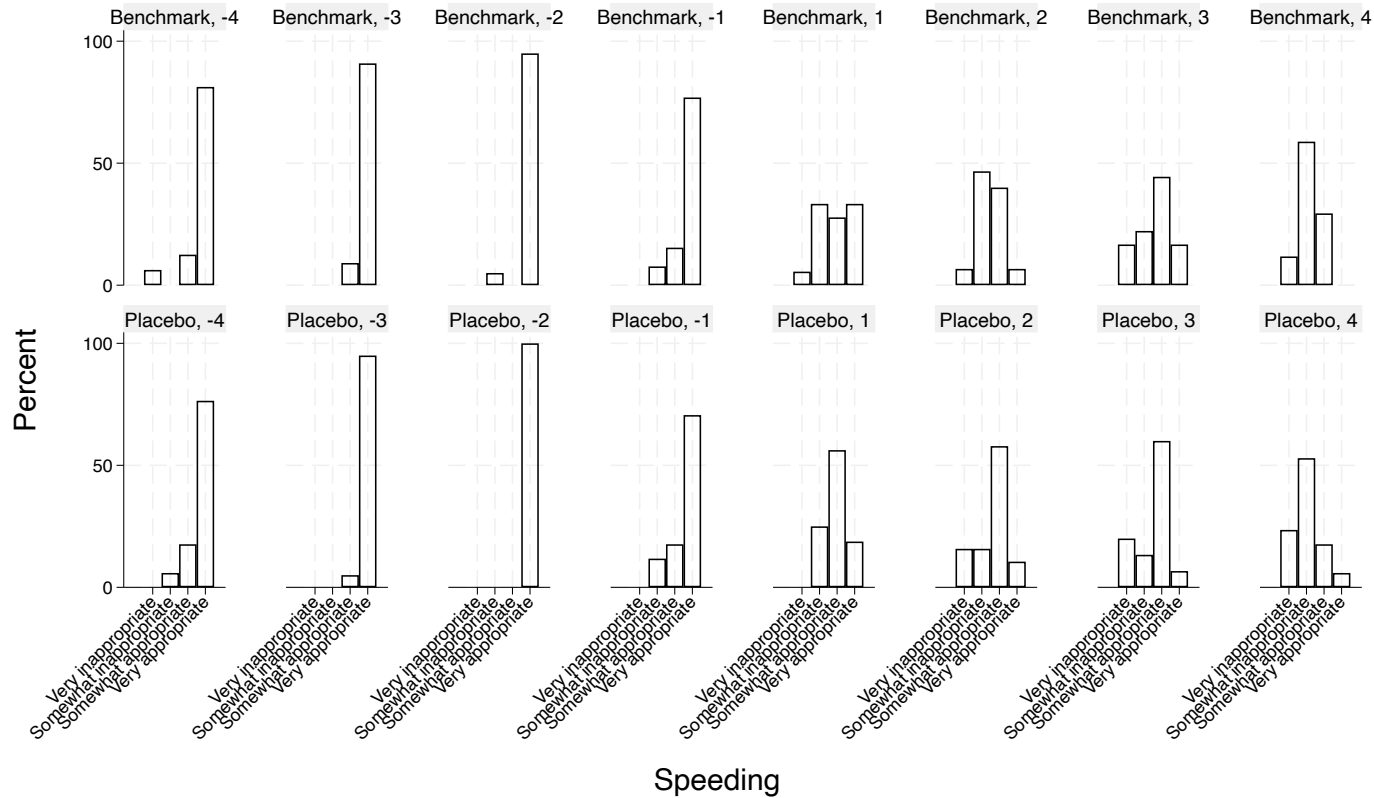


FIGURE B4. DISTRIBUTION OF SOCIAL APPROPRIATENESS RATINGS: SPEEDING

Notes: Figure B4 represents the distribution of social appropriateness ratings in all 16 treatments of *Speeding* in the follow up experiment. The first dimension of the experiment manipulates vignette length by comparing the benchmark vignette with a placebo treatment that included additional normatively irrelevant information. The second dimension manipulates the distance from the legal threshold (i.e., speed limit) and sets it as +/- 1, 2, 3, or 4 (positive distance indicating illegality). The four rating options are: very appropriate, somewhat appropriate, somewhat inappropriate, and very inappropriate.