Can the legal framework for prostitution influence the acceptability of buying sex?

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Abstract

Objectives This article analyzes the extent to which the legal framework for prostitution can influence the moral judgments individuals make about purchasing sex. We hypothesize that the decriminalization of prostitution (versus the criminalization of purchasing sexual services) increases the acceptability of buying sex.
Methods To test this hypothesis, we conduct a factorial survey experiment (FSE) for a Spanish sample. Various descriptions (vignettes) of hypothetical scenarios regarding prostitution in Spain were presented to the respondents to elicit them to form judgements about the acceptability of purchasing sexual services (by a man from a woman) in each of these scenarios.
Results From the analysis carried out with multilevel models, robust and causal empirical evidence was obtained in favor of this hypothesis. This result was moderated by some of the contextual variables presented in the vignettes and by some personal characteristics of the respondents.
Conclusions Different legal approaches to the sex industry can influence attitudes towards purchasing sexual services.

Keywords Prostitution · Decriminalization · Criminalization of the client · Acceptability of buying sex · Factorial survey experiment

Introduction

One of the questions in the World Values Survey (WVS 2020) is "Do you consider prostitution justifiable?" (1="never justifiable"; 10="always justifiable"). Data from the

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2017–2020 wave showed that 47.6% of respondents in Sweden considered it to be "never justifiable," whereas this figure was 16.1% in the Netherlands. The mean scores were 2.78 and 5.16, respectively. Are these results linked to current legal approaches to the sex industry in these two countries?

When legislators are considering how to reform prostitution policies, the current models in Sweden and the Netherlands serve as leading examples of the two main approaches to this issue: the criminalization of the client (or the "Nordic model") and decriminalization approaches. The debate on these two models is particularly intense among feminists, with highly polarized and apparently irreconcilable positions and convincing arguments in defense of each side. Empirical evidence on the effects of each of these two approaches is also inconclusive (Aronowitz 2014; Wagenaar 2017; Erikson and Larsson 2019; Skilbrei 2019).

One of the issues being debated is whether the regulatory model influences attitudes to prostitution. Some studies with survey data (Kotsadam and Jakobsson 2014; Immordino and Russo 2015; Jonsson and Jakobsson 2017) have compared data from different countries and obtained important empirical evidence that the legal status of prostitution may influence its social acceptability.

We intend to add to the empirical evidence in this area. To this end, we first narrow the scope of analysis and formulate the following research question: does the decriminalization of prostitution (versus the criminalization of the client) increase the acceptability of buying sex? Second, we use a different (and complementary) methodology to those used by previous authors and carry out a factorial survey experiment (FSE) using a Spanish sample. Several descriptions (vignettes) of hypothetical situations regarding prostitution in Spain are presented to the respondents to elicit them to form judgments about the acceptability of buying sex in each of these scenarios. We construct the vignettes with 5 dimensions or factors, the most relevant being the one concerning the legal way in which prostitution in Spain could hypothetically be regulated: decriminalizing/criminalizing the purchase. Our dependent variable is the answer (after examining each vignette) to the question: "To what extent do you think it is acceptable for a man to pay money to buy sexual services from a woman?" Despite a significant number of men working in prostitution, it is mostly men who require sexual services and in most cases it is women who offer them (Meneses et al. 2018). Therefore, prostitution is, to a significant degree, a gendered phenomenon. We want to emphasize this fact in the wording of the dependent variable. However, this does not mean that we do not attach importance to the phenomenon of male prostitution.

As can be seen in the next section, Spain is an interesting option for carrying out this FSE since the prevailing legal treatment of prostitution in Spain is "legal, but unregulated" (Reinschmidt 2016). The country is currently in the midst of an important debate about its reform and regulation, with the Dutch and Nordic models being the reference points for that debate.

Regulatory models and discussion about their reform

All countries criminalize aspects such as child prostitution, forced prostitution and trafficking. However, the "voluntary" sale of sexual services receives very diverse and often complex legal treatment (Skilbrei 2019).

According to Post et al. (2019) and Aronowitz (2014), four different regulatory models can be identified: "Full criminalization," where all prostitution is illegal, both the sale and the purchase of sex are prosecuted and punished criminally, and the facilitation of sexual services (running a brothel or pimping) is also illegal. This is the existing legal framework in countries such as the USA (except for some counties in Nevada state) and Russia. "Partial decriminalization," where the supply and sale of sexual services are legal, but their purchase and facilitation are illegal. This model is often referred to as the Swedish or Nordic model. This is the model that currently exists in Sweden, Norway, Iceland, France and Ireland. "Legalization," where prostitution is fully legalized. The purchase and sale of sexual services are allowed, as is the facilitation of sexual services. However, prostitution is considered a "singular activity" that requires a specific type of market regulation (work permits, mandatory health checks, licensing system for sex businesses, tolerance zones, etc.). Austria, Switzerland, the Netherlands and Germany are some of the countries that have implemented this model. Finally, there is "decriminalization," where prostitution is fully decriminalized. While a minimum level of prostitution-specific regulation may be imposed, activities related to prostitution are basically subject to the same generic rules and regulations as other economic and labor activities. The aim is to treat prostitution like any other occupation. New Zealand has been an example of this regulatory model since 2003.

This classification raises the problem that countries such as Spain, where voluntary prostitution is not legally regulated, do not readily fit into any of the categories. The Spanish Penal Code of 1995 punishes human trafficking (article 177) and child prostitution (article 188). In terms of voluntary prostitution by adults, article 187 punishes cases where it can be shown that the prostitution is carried out under duress or where someone is making a profit from exploiting the prostitution of another person (Villacampa and Torres 2013). The Citizens' Security Law ("gag law") was approved in 2015, placing limitations on the supply and demand for sexual services in certain public transit zones (near schools, etc.). Although pimping is legally forbidden, in practice, the facilitation of sexual services is not highly restricted (for example, brothels usually operate using tourist business licenses). It can be argued that in Spain, these activities, and prostitution in general, take place in the context of a legal vacuum (Reinschmidt 2016), where activities related to voluntary prostitution are not legally recognized but nor are they explicitly prohibited.

We believe that the Immordino and Russo (2015) and Reinschmidt (2016) classifications fit the Spanish case better. Immordino and Russo (2015) use three possible categories: "illegal" (which includes countries that primarily punish sex workers, those that punish clients and those that punish both), "legal" (the exchange of sex for money is not specifically prohibited by law and there are no other laws concerning voluntary prostitution) and "regulated" (prostitution is specifically allowed by law under certain rules and regulations). Reinschmidt (2016) identifies four categories: "ban on prostitution," "prohibition of the purchase of sexual services," "legal, unregulated" and "legal, regulated." In accordance with the classification made by Immordino and Russo (2015), the prevailing legal regime for prostitution in Spain is "legal," or "legal, but unregulated" to use the terminology of Reinschmidt (2016).

The fact that prostitution is not legally regulated in Spain explains why there is currently consensus about the need for legal reform to remove this legal vacuum (Villacampa and Torres 2013; Gómez-Suárez et al. 2016). From this starting point (and in line with the international debate in this area), the criminalization of the client

and the legalization of prostitution (which we refer to as the "decriminalization of prostitution") are the two main options for legal regulation characterizing the debate in Spain (Gómez-Suárez et al. 2016). That is why in our experiment we simplify the debate and distinguish only these two main approaches to prostitution. We admit that this simplification limits the scope of our experimental design (for example, it does not consider the option of full criminalization), but, on the other hand, it is fully consistent with the two major reform options identified in the debate in Spain (in the cover letter for the experiment, we remind the participants of the terms of this debate).

Although we do not have space to take a wide-ranging look at this topic, in relation to the consequences of each of these two models, the literature seems to indicate that criminalizing the client (versus decriminalizing prostitution) could lead to a reduction in the scale of both prostitution and human trafficking for prostitution purposes; but it could also increase the vulnerability of people who continue to practice prostitution (Cho et al. 2012; Jakobsson and Kotsadam 2013; Holmström and Skilbrei's 2017b). Another of the aspects highlighted in the literature is the possibility that (along with the fear of punishment) one of the main mechanisms through which client penalization could reduce demand and the extent of prostitution is normative change. For instance, referring to the process of drafting the Swedish Sex Purchase Act, Holmström and Skilbrei (2017b) point out that "proponents of criminalizing clients were [...] more focused on the symbolic aspects of the legislation, arguing that the unilateral criminalization of clients would send a strong normative message that Swedish society does not accept men's exploitation of women." This type of moral judgment involving a law is the subject of our research.

The impact of laws on moral judgments

Laws have an exemplary effect

Laws (and also court judgments) often have an exemplary effect. Laws not only constitute simple reward and punishment systems but can also have a symbolic impact on people's attitudes and the moral judgments they make (Bilz and Nadler 2009).

The impact of laws on moral judgments can take place both when a law is repealed and when it is passed (Berkowitz and Walker 1967). An example of the former would be the repeal of a law that criminalizes homosexual conduct. Such a derogation would indicate that society no longer disapproves of homosexuality. An example of the latter would be the approval of an anti-discrimination law. This new law, in addition to changing behaviors, could change (favorably) both cognitions about and emotions towards stereotyped groups (Allport 1954; Bilz and Nadler 2009).

The direction of causality between moral judgments and the law can go either way (Bilz and Nadler 2009). On the one hand, the approval of a law is normally a reflection of a prior change in the (moral) attitudes of a section of society (for instance, the prior change in attitudes—of a section of the population—towards homosexuality in Spain led to the approval in 2005 of the law allowing same-sex marriages). On the other hand, the introduction of a new law could change (favorably) the attitudes of another section of the population (the normalization of gay marriage in Spain may have meant that another section of the population favorably changed their attitudes towards homosexuality). It is this second direction of causality that is of interest in this research.

Why can the law affect moral judgments? There are three basic reasons for this (Bilz and Nadler 2009):

Informational influence: the law as a moral anchor (Bilz and Nadler 2009). When making moral judgments under conditions of uncertainty, people look for information in their environment (family, peers, workplaces, media…). In this respect, the law (that is common to all these actors) can provide credible cues for making judgments. This means that people may trust normative information contained in the law when deciding between right and wrong (Mentovich and Zeev-Wolf 2018). The informational influence of law can be seen as a heuristic process (Bilz and Nadler 2009), in the sense that we rely on characteristics of the message source to make a quick judgment about the persuasiveness of the information. If the legal system is seen as a legitimate and trustworthy institution, this heuristic process will work more intensely.

Group identification and the law: People tend to form and maintain stable, strong and positive relationships with others (Baumeister and Leary 1995). They have an intrinsic desire to associate with others and be socially accepted (need to belong). Nation and citizenship are very general groups with which most people can identify. Therefore, people are expected (to a greater or lesser degree) to match their attitudes to those of their fellow citizens. In this respect, if people believe that the legal codes generally map onto the community's moral norms, then the law can influence the construction of their own moral judgments. This argument may be related to the idea of a "sense of duty," according to which people adhere to the prescribed code of conduct because they think it is "right" (Berkowitz and Walker 1967).

Behavioral shift: There may be people who obey a new law, not because they share the moral code it contains, but to avoid punishment or other legal sanctions that not obeying it would entail. However, this behavioral shift can lead over time to an intrinsic normative shift (Mentovich and Zeev-Wolf 2018; Bilz and Nadler 2009). This may be the case of antidiscrimination laws. For example, having to comply with a law that penalizes discrimination against women in hiring decisions may lead some people to internalize the idea that penalizing women in selection processes is something unfair.

The design of our experiment enables us to capture the extent to which the acceptability (moral approval) of a man buying a woman's sexual services depends (among other things) on the existing legal framework. In this case, a reduction in acceptability (for the same person) when moving from a situation in which prostitution is legal to one in which the client is penalized, given the characteristics of our design, could reflect the joint effect of the moral anchor and group identification factors.

The experimental evidence on the effects of laws or court sentences on moral judgments is relatively scarce and the only previous papers that address this issue are those of Berkowitz and Walker (1967) and Mentovich and Zeev-Wolf (2018).

Criminalization and acceptability of buying sex

There are three studies with survey data (Immordino and Russo 2015; Kotsadam and Jakobsson 2014; Jonsson and Jakobsson 2017) that compare data from different countries and try to find empirical evidence that the criminalization of prostitution could change attitudes.

Immordino and Russo (2015) used data from the World Values Survey (WVS) from 2005 to 2008. They asked the question "Do you consider prostitution justifiable?"

(1="never justifiable"; 10="always justifiable"). By using the instrumental variables method (to overcome endogeneity problems) and after controlling for religious, cultural and sociological factors, they concluded (causally) that if prostitution is legal (regulated or unregulated), individuals tend to justify it significantly more than they do if it is prohibited.

Kotsadam and Jakobsson (2014) used individual-level survey data from Sweden (criminalization of the client), Norway (criminalization of the client from January 2009) and Denmark (legal) for the periods 2008, 2009 and 2010. They asked the question "Is it according to you morally justified or morally wrong to pay for sex?" (0="morally completely justified"; 10="morally entirely wrong"). They found that the degree to which paying for sex is considered morally wrong is greater in Sweden than in the other two countries. In addition, in the case of Norway, they took advantage of the natural experiment dimension derived from the fact that they had data from before and after the introduction of the new law that criminalized the client. Using difference-in-differences estimation, they concluded that the introduction of the new law (criminalizing buying sex) reduced the quantity of sex bought (in Norway compared to Sweden). For the "paying for sex is morally wrong" variable, they obtained a similar result but, in this case, the result was not statistically significant.

Later, Jonsson and Jakobsson (2017) extended the previous work by comparing attitudes towards prostitution across eight Western European countries. Citizens in countries where prostitution is legal-regulated (the Netherlands and Germany) were more accepting of people buying sex than citizens in countries where the purchase of sex was criminalized (Sweden and Norway). Additionally, they obtained evidence for the Swedish and Norwegian subsample showing that people with more sensitivity towards gender equality were less accepting of the purchase of sex; however, this was not the case for the Dutch and German subsamples.

Current study and hypothesis

In this research, we use a factorial survey experiment (FSE). An FSE (also called a vignette experiment) consists of the use of a multidimensional experimental design within a survey. An FSE involves showing different hypothetical situations, objects, or people (called vignettes) to the respondents to elicit them to form judgments about these scenarios (Steiner et al. 2016). The levels (categories) of the dimensions (experimental factors) are experimentally varied across the vignettes so that the impact of those levels on the respondents' judgements can be estimated (Auspurg and Hinz 2015). When administered within a questionnaire, FSEs enable the use of larger and more representative samples than are used in classical controlled experiments and the introduction of many more dimensions. FSEs allow the internal validity of controlled experiments to be combined with the external validity of surveys.

There are three reasons why FSEs are appropriate for testing complex decision-making situations (Van Breeschoten et al. 2018). First, people are often not aware of the factors entering into their own decision-making process, so they find it difficult to

provide an accurate answer when asked directly about their motivations in a questionnaire. In an FSE, respondents only need to evaluate a series of hypothetical situations and researchers use these evaluations to draw a series of conclusions about their beliefs, attitudes, or behaviors. Second, in FSEs, there is a lower risk than in a conventional survey of being given socially acceptable answers, as the theoretically relevant factors are "hidden" in the vignettes. Third, causal relations can be investigated through FSEs since it is an experimental methodology in which the researcher randomly assigns a series of experimental conditions among the respondents.

Since Peter H. Rossi first used this method (Rossi et al. 1974), FSEs have been used in very different environments, for example, fairness of earnings (Steiner et al. 2016; Auspurg et al. 2017); labor discrimination (van Borm and Baert 2018; Fernández-Lozano et al. 2020); gender norms (Pedulla and Thébaud 2015); attitudes towards gay rights (Doan et al. 2015); propensity for corruption (Dickel and Graeff 2018); attitudes towards immigration (Protsch and Solga 2017); and biases in the recommendation of medical treatment (Green et al. 2007). The FSE method does not seem to have been used to date for researching attitudes towards prostitution. Nevertheless, it is important to mention the research performed by Stoebenau et al. (2019) in the field of transactional sex.

As Table 1 shows, in our research, we consider five dimensions, each with two levels. We focus on the effects of the first dimension (decriminalization/criminalizing the purchase) on the acceptability of buying sex. The other four dimensions are used for several purposes: to mask the theoretically relevant factor we are analyzing through the first dimension; to give more coherence to the vignettes; and to analyze the effects of the two possible ways of regulating prostitution under different controlled contexts regarding trafficking, pimping, places and policies. The advantage of the FSE is that it allows us to ask for the attitudes of respondent in a way that all possible interactions between dimensions are considered.

Table 1 Vignette dimensions and levels

Dimension	Levels	
Decriminalized	Purchasing sexual services is authorized in Spain and offering them is legally considered on a par with any other occupation	The purchase of sexual services is illegal in Spain (the client is punished)
No-trafficking	There is very little evidence that some of the women engaged in prostitution are victims of trafficking situations	There is considerable evidence that some of the women engaged in prostitution are victims of trafficking situations
Indoor	In most cases prostitution is carried out in legally established places (flats or clubs)	In most cases prostitution is carried out on the street or in informal places
No-Pimping	A relevant part of the sex trade sector is controlled by sex workers themselves	A relevant part of the sex trade sector is controlled by pimp networks
Empower	An ambitious public policy aimed at promoting the health and rights of sex workers is being implemented	An ambitious public policy aimed at helping prostituted women to abandon this activity is being implemented

The first dimension (decriminalizing/criminalizing the purchase) attempts to respond to the key research question in our article: Does the decriminalization of prostitution (versus the criminalization of the client) increase the acceptability of buying sex? Based on the previously reviewed literature on the relationship between the criminalization of buying sex and changes in citizen attitudes, we propose the following hypothesis:

> *Hypothesis 1.* Having a (hypothetical) legal framework in which prostitution is decriminalized (compared to the situation in which the client is criminalized) has a positive effect on the acceptability of buying sex.

The no-trafficking/trafficking and no-pimping/pimping dimensions refer to the working conditions and exploitation of sex workers. Low levels of trafficking and pimping (implying better working conditions and a lower risk of exploitation for sex workers) can be expected to lead to the greater acceptability of buying sex among respondents. Additionally, we consider that these two dimensions can act as moderating variables of the effect of the first dimension. The impact of moving to a decriminalizing legal framework (from one that criminalizes the client) on the acceptability of buying sex could be argued to be greater when respondents perceive that sex workers carry out their work relatively safely and with a low risk of exploitation (no-trafficking/no-pimping). This leads us to formulate a second hypothesis:

> *Hypothesis 2.* The type of condition in which sex workers carry out their activity moderates the impact of decriminalization on the acceptability of buying sex: this effect is greater in contexts (vignettes) where prostitution is carried out under relatively low risk of exploitation (no-trafficking/no-pimping) than when it is exercised with a high risk of exploitation (trafficking/pimping).

The indoor/street dimension refers to the precariousness with which sexual services are provided. Most prostitution being carried out in legally established locations (flats or clubs) may result in greater acceptability of buying sex among participants than one in which prostitution is predominantly carried out on the street or in informal settings. Finally, the empowerment/exit condition refers to the type of public policy in place in the field of prostitution. If public policy is oriented towards promoting the health and rights of sex workers more than helping prostitutes to abandon this activity, the policy maker is signaling that prostitution does not have to be morally wrong; in this case, the respondents could be expected to find buying sex more acceptable. These two dimensions serve mainly to mask the theoretically relevant effect of the first dimension and to give more coherence to the vignette as a whole. For this reason, we do not formulate hypotheses in relation to them and only evaluate their results in an exploratory way.

In addition, as the FSEs involve conducting a survey, when analyzing the determinants of the acceptability of buying sex, and in line with other studies on attitudes towards prostitution (Kotsadam and Jakobsson 2014; Immordino and Russo 2015; Jonsson and Jakobsson 2017), we also include a series of variables that measure the personal characteristics or attitudes of the respondents. This allows us to take into account the heterogeneity between the respondents.

One variable that particularly interested us is the attitude of respondents to the idea of prostitution as a form of violence. A discourse associating prostitution with gender

violence has spread among a section of the Spanish population (Villacampa and Torres 2013), so we introduced a question on this issue in our questionnaire. We consider that a belief that prostitution is a form of gender violence can have two effects: first, a significant negative impact on the acceptability of buying sex; and second, it can be a moderating variable of the effect of the decriminalization of prostitution on its acceptability. In other words, those who think that prostitution does not always have to be a form of violence are less likely to categorically reject it and their judgments will be more dependent on the situations shown in the vignettes (the impact of decriminalization on acceptability would be greater among this group). For this reason, we propose the following hypothesis:

Hypothesis 3. Whether or not respondents believe prostitution is a form of violence moderates the effect of decriminalization on the acceptability of buying sex: this effect is greater when respondents do not consider prostitution to be a form of violence than when they believe that it is.

According to the literature (Jakobsson and Kotsadam 2013; Jonsson and Jakobsson 2017; and Holmström and Skilbrei 2017a), women are less accepting than men of buying sex. As discussed above, prostitution is, to a significant degree, a gendered phenomenon. For this reason, it is not surprising that the acceptability of buying sex is lower among women; furthermore, since there are more women than men who categorically reject the purchase of sexual services, the positive effect of the decriminalization of prostitution on the acceptability of buying sex could be expected to be greater among men than women. Remember too that the very wording of the question that constitutes our dependent variable ("To what extent do you think it is acceptable for a man to pay money to buy sexual services from a woman?") makes the genderization of prostitution more salient. These aspects justify us adding a fourth hypothesis:

Hypothesis 4. The acceptability of buying sex is lower among female than male respondents. The respondent's gender may moderate the effect of decriminalization on the acceptability of buying sex: this effect is greater among men than women.

Likewise, in our analysis, we included four more variables corresponding to the respondents (three related to attitudes and one to a personal characteristic) that we consider may affect the acceptability of buying sex. "Conformity to masculine norms" is a construct which we apply to both men and women, measured through a validated instrument developed by Burns and Mahalik (2008). The higher the score obtained in this instrument, the higher the conformity to an array of dominant cultural norms of masculinity (power over women, self-reliance, risk taking, etc.). We consider that there may be a positive relationship between these regulatory messages and the acceptability of buying sex. The same thing occurs with the "Anti-egalitarianism" instrument, which is a subscale of the Social Dominance Orientation (SDO), developed by Ho et al. (2015). We also consider the "Economic liberalism" variable, and we assume that people who obtain a high score on this scale tend to accept prostitution to a greater degree, since they tend to consider the activity of selling sexual services as just another

economic activity, which requires minimal state intervention. Finally, we include the variable "Income more than €2000," since we consider that income level can affect the acceptability of buying sex. The detailed definition of these variables is set out later, in the "Data and methods" section. Other personal characteristics, such as the age of the participant, were not included in the analysis as they did not produce any statistically significant results on the dependent variable.

Data and methods

Vignette and experimental design

Our design presents the respondents with several hypothetical situations for the sex market in Spain. The key part of the questionnaire consists of the description of four hypothetical situations with five different dimensions (Decriminalized, No-trafficking, Indoor, No-pimping, Empowerment). For each dimension, we set two levels. As Table 1 shows, for each dimension, the level that appears in the left column can be expected to positively influence the acceptability of buying sex with respect to the level that appears in the right one. In relation to the multilevel analysis carried out later, for each dimension, the level on the left is coded as 1 and the one on the right as 0 (for example, in the case of the Decriminalized dimension, there are two levels: "decriminalization"=1 and "criminalizing the purchase"=0).

In our experiment's design, with five dimensions of two levels each, there are 32 (2×2×2×2×2) possible hypothetical situations (vignette population). Since this is not a large number, we decided to use the vignette universe in its totality. As it is impossible to expose each respondent to 32 hypothetical situations (without saturating them), it was necessary to reduce the number of vignettes presented to each person while still allowing the main effects of each dimension and their cross effects to be identified. We used the SAS macro "%MktBlock" to allocate the 32 vignettes to 8 different questionnaire versions (decks), each consisting of four vignettes, providing a 100% D-efficient design (see Table S4 in Supplemental Material). Once these 8 decks had been designed, each respondent was randomly presented with only one deck, so each respondent had to make a judgment about the acceptability of the purchase of sexual services in only four hypothetical situations. Each deck is configured in such a way that, for each dimension, the participant is exposed twice to one of its levels and twice to the other. Furthermore, the order of presentation of the four vignettes was randomized within each deck.

Questionnaire

The questionnaire had two parts: the first on the FSE and the second on gathering information on demographics and attitudes from the respondents (see the questionnaire in the Supplemental Material). At the beginning of the questionnaire, the respondents read the following cover story: "In this research, we want to know the degree of acceptance among the Spanish population of the complex and controversial phenomenon of prostitution (exchange of sexual services for money)." Then, in the first part, after a brief explanation of the different ways of regulating prostitution and its legal

status in Spain, the respondents were informed that they were going to be shown four different hypothetical situations that would characterize prostitution in Spain, and: "Please try to imagine that each of these situations is the real position in Spain. For each of them, we are interested in knowing the extent to which you consider it acceptable (or not) for a man to pay money to buy sexual services from a woman." After that, each respondent was shown the four vignettes consecutively on the screen (corresponding to the deck randomly assigned, out of the eight possible decks). An example of a vignette is shown in Fig. 1. Under each vignette, each respondent had to answer the question that constitutes the dependent variable of our research: "On the next scale from 0 (absolutely unacceptable) to 10 (absolutely acceptable), to what extent do you think it is acceptable for a man to pay money to buy sexual services from a woman?."

In the second part of the questionnaire, the respondents were asked to provide some information about themselves: age, sex and other demographic information, including sexual orientation. Regarding information on attitudes, the following variables were obtained from the questions included in the questionnaire. First, "Conformity to masculine norms," obtained using the validated "Conformity to Masculine Norms Inventory-22" (CMNI-22) instrument developed by Burns and Mahalik (2008). It contains 22 items answered on a 6-point Likert scale (1="strongly disagree" to 6="strongly agree"). An example of these items is "It would be awful if someone thought I was gay." The range of values is from 1.23 to 4.86 (see Table S20 in Supplemental Material). Cronbach's alpha is 0.731. The higher the score, the higher the conformity to masculine normative messages. Second, "Anti-egalitarianism," a subscale of the validated "Social Dominance Orientation" (SDO) instrument developed by Ho et al. (2015). It contains 4 items answered on a 6-point Likert scale (1="strongly disagree" to 6="strongly agree"). An example of these items is "Group equality should not be our primary goal." The range of values is from 1 to 6. Cronbach's alpha is 0.805. The higher the score, the higher the anti-egalitarian attitudes. Third, "Economic liberalism" is a single item variable answered on a 10-point Likert scale (0="totally in favor of the state putting limits on what can be bought or sold" to 10 = "totally against of the state…"). Fourth, "Prostitution-violence" is a dichotomous variable (1="yes"; 0="no") which is the answer to the question of whether one is in favor or against the following statement: "prostitution is a form of violence." Finally, "Income more than €2000," is a dichotomous variable (1="yes"; 0="no"), obtained after dichotomizing an initial set of eight monthly net income categories.

HYPOTHETICAL SITUATION (of the sex market in Spain)

- Purchasing sexual services is authorized in Spain and offering them is legally considered on a par with any other occupation
- There is very little evidence that some of the women engaged in prostitution are victims of trafficking situations
- In most cases prostitution is carried out on the street or in informal places
- A relevant part of the sex trade sector is controlled by pimp networks
- An ambitious public policy aimed at promoting the health and rights of sex workers is being implemented

Fig. 1 Example of a vignette

Sample

Data for this study were obtained from an email survey of 1000 respondents in May 2020 through the web platform tickStat (www.tickstat.com), which in Spain sells the data of the Cint Platform (www.cint.com). Cint has more than 100 million panelists across 150 countries. This platform allows the automatic management of complex quota configurations to fit any research need.

From the group of panelists over 16 years old residing in Spain, we drew a quota sample of 1000 respondents. In order to ensure that our sample had some representativeness with this population group (people over 16 years old residing in Spain), 168 panelist respondent quotas were imposed based on the region of residence (NUTS1), sex, age, cohabitation as a couple and employment status. These quotas were selected to obtain a sample distribution similar to that of the Economically Active Population Survey, which is a representative survey produced by the Spanish National Institute of Statistics (Table S5 in Supplemental Material).

To obtain a sample with the appropriate quality in the responses, the completion and sending of the questionnaires (by the panelist) were subject to the following restrictions: (1) belonging to any of the quotas mentioned above; (2) answering all the questions (the system configuration required them to answer all the questions in order for the questionnaire to be accepted); and (3) minimum response times were required: minimum of 15 s to read the first screen with the basic instructions.

Once our sample of 1000 respondents had been obtained, we performed a data cleansing process (Meade and Craig 2012). Three questionnaires were detected exhibiting inconsistent responses. We excluded these three cases, so that the final sample was $n = 997$ respondents.

In this final sample, 51.2% of respondents were female; average age was 45.7; 72.8% had a stable partner; 60.3% had children; 46.2% had university studies; and 52.2% had a job. For more information on the sample, see the Supplemental Material.

Prior to our sampling, we conducted a small pilot study with 101 respondents (university students) in order to test the practicability of our vignette experiment and to obtain empirical data for determining the required sample size in a power simulation. We did not use this pilot sample in our study.

Analytical strategy

We use a linear model to estimate the effect of each of the five dimensions on the dependent variable. As our experimental design is 100% D-efficient with random respondent assignment to each deck, there is no correlation between the dimensions and the heterogeneity of the respondents (observed and unobserved); i.e., the covariates are uncorrelated with the error terms (Auspurg and Hinz 2015, pp. 91–92). Additionally, each respondent evaluates four vignettes. This allows as to control for unobservable cross-sectional (respondent) heterogeneity between individuals by using multilevel random effects models (Auspurg et al. 2017). The first level of the model is the vignette level, where the acceptability of buying sex is affected by the combination of the five dimensions that appear in each vignette (and perhaps their interactions). The second level of the model is the individual level. This second level captures the effect of respondent heterogeneity on the acceptability of buying sex through individual

observed covariates and unobserved individual random effects. This respondent heterogeneity affects both the intercept term and also the slopes (factors coefficients) of the first level. More specifically, the multilevel model we are going to estimate is (see Hox et al. 2017):

$$\left. y_{ij} = \beta_0 + \sum_{p=1}^{5} \beta_p x_{ijp} + \sum_{p=1}^{5} \sum_{k>p} \beta_{pk} x_{ijp} x_{ijk} + u_{ij} \right\} \text{ First (vignette) level}$$

$$\left. \begin{array}{l} \beta_0 = \gamma_{00} + \sum_s \gamma_{0s} Z_{js} + u_0 \\ \beta_p = \gamma_{p0} + \sum_s \gamma_{ps} Z_{js} + u_p \end{array} \right\} \text{ Second (individual) level}$$

where i is the vignette index ($i = 1, \ldots, 4$); j is the individual index (with $j = 1, \ldots, 997$); y_{ij} is the level of acceptability corresponding to vignette i and individual j; x_{ijp} are the five experimental dimensions ($p = 1, \ldots, 5$); Z_{js} are the observed socio-demographic individual variables, including interactions, $s = 1, \ldots, S$); $\gamma_{..}$ and β_{pk} are the fixed effects; u_0, u_p (with $p = 1, \ldots, 5$) are the random individual effects; and u_{ij} is the vignette error term.

Substituting the second level effects (individuals) into the first level effects (vignette) gives the joint specification of the model:

$$y_{ij} = \gamma_{00} + \sum_s \gamma_{0s} Z_{js} + \sum_{p=1}^{5} \gamma_{p0} x_{ijp} + \sum_{p=1}^{5} \left(\sum_s \gamma_{ps} Z_{js} \right) x_{ijp}$$
$$+ \sum_{p=1}^{5} \sum_{k>p} \beta_{pk} x_{ijp} x_{ijk} + u_{ij} + u_{0s} + \sum_{p=1}^{5} u_{ps} x_{ijp}$$

That disaggregates the effect on each individual's responses to each vignette y_{ij} into: a common constant or intercept, γ_{00}; the $p = 5$ individual factors, x_{ijp}; the S variables for the specific characteristics of each respondent, Z_{js}; the interactions of each individual variable with each factor, $x_{ijp} Z_{js}$; and the interactions among the factors, $x_{ijp} x_{ijk}$. In addition, the last three elements include vignette random effects, u_{ij}; random intercepts effects, u_0; and random slopes effects, $\sum_{p=1}^{5} u_p x_{ijp}$. These random effects do not have a coefficient associated with them. For these random effects (which all have zero mean), we must estimate their variances and covariances. In the final models reported below, not all individual characteristics and interactions have been included. Only those that were statistically significant are reported.

Results

Tables S24 and S25 of the Supplemental Material show the existing associations between the acceptability of buying sex and the independent variables included in

our analysis. As a first preliminary result on the effect of our main dimension (Decriminalized), it is worth noting that the mean score (on a scale of 0–10) obtained for acceptability of buying sex was 3.99 when prostitution was decriminalized, and 3.18 when buying sexual services was criminalized (decriminalizing/criminalizing ratio=1.26).

In order to analyze the extent to which the four hypotheses are confirmed, Table 2 shows the estimated results of four specifications of our multilevel model: model M1 only includes the main effects of the five vignette dimensions; model M2 adds the individual variables corresponding to the respondents' characteristics; model M3 adds the two-way interactions between Decriminalized and the No-trafficking and No-pimping dimensions; model M4 adds the two-way interaction between Decriminalized and the Prostitution-violence variable. In all cases, random individual effects were statistically significant, showing the convenience of using the multilevel model regressions. All variances were estimated using the robust restricted maximum likelihood method.

Regarding hypothesis 1 (decriminalization positively affects the acceptability of buying sex), model 1 of Table 2 (and Fig. 2(1)) shows that the Decriminalized dimension has a positive and statistically significant effect (b=0.126, p<0.001) on the dependent variable (acceptability of buying sex). This effect is maintained when the six variables relating to the respondents' characteristics (model 2) are added to the five dimensions of model 1. The experimental design used in this research allows us to affirm that there is a positive causal relationship between the fact that prostitution is (hypothetically) decriminalized (regarding the situation in which the client is criminalized) and its acceptability. In other words, hypothesis 1 is confirmed. Models 1 and 2 also show that the other four dimensions had the expected effect on acceptability of buying sex. They particularly show the important positive causal effect of No-trafficking and No-pimping on the acceptability of buying sex. The Empower dimension shows only a marginally significant effect (p<0.10).

To test hypothesis 2 (the effect of Decriminalized on acceptability of buying sex is more intense when considering vignettes where prostitution is carried out under conditions of low risk of exploitation of sex workers), the corresponding interactions of Decriminalized with the No-trafficking and No-pimping dimensions were considered. Statistically significant results (see model 3 of Table 2) were obtained in both cases: b=0.058, p<0.001, for the interaction of Decriminalized with No-trafficking, and b=0.056, p<0.01, for the interaction of Decriminalized with No-pimping. These moderating effects are also shown in Figs. 2(2) and 2(3). In both figures, the effects (on acceptability) of Decriminalized are crossed with those of No-trafficking and No-pimping, respectively. The fact that the resulting lines are not parallel shows that such interactions exist. With this result, hypothesis 2 is confirmed: the effect (positive sign) of decriminalizing prostitution on its acceptability is greater if the respondents are faced with hypothetical situations in which levels of trafficking and pimping are low (in both figures, the upper line has a steeper slope than the one below). On the other hand, when the vignettes show a situation in which sex workers are the victims of trafficking and where a significant amount of the sex trade is controlled by pimps, that is, when they are shown a situation in which sex workers practice their activity in generally precarious conditions and at risk of sexual exploitation, there is a reduction in both the degree to which respondents accept prostitution and the sensitivity of acceptability to its legal status.

Table 2 Multilevel regression for the acceptability of buying sex (random intercept and slopes model)

Variables	M1 B (SE)	M1 b	M2 B (SE)	M2 b	M3 B (SE)	M3 b	M4 B (SE)	M4 b
Vignette dimensions								
Decriminalized	0.833 (0.071) ***	0.126	0.834 (0.071) ***	0.126	0.401 (0.137) **	0.060	0.683 (0.156) ***	0.103
No-trafficking	1.021 (0.067) ***	0.154	1.026 (0.067) ***	0.155	0.811 (0.090) ***	0.122	0.808 (0.090) ***	0.122
Indoor	0.213 (0.055) ***	0.032	0.212 (0.055) ***	0.032	0.225 (0.055) ***	0.034	0.225 (0.055) ***	0.034
No-pimping	0.825 (0.067) ***	0.124	0.828 (0.067) ***	0.125	0.614 (0.101) ***	0.093	0.611 (0.101) ***	0.092
Empower	0.104 (0.060) †	0.016	0.106 (0.060) †	0.016	0.101 (0.060) †	0.015	0.097 (0.060)	0.015
Respondent characteristics								
Woman			−0.498 (0.152) **	−0.075	−0.503 (0.152) ***	−0.076	−0.503 (0.152) ***	−0.076
Prostitution is violence			−2.293 (0.154) ***	−0.344	−2.287 (0.153) ***	−0.343	−2.028 (0.168) ***	−0.304
Income more than €2000			0.476 (0.166) **	0.062	0.475 (0.166) **	0.062	0.475 (0.166) **	0.062
Economic liberalism			0.115 (0.026) ***	0.100	0.114 (0.026) ***	0.099	0.114 (0.026) ***	0.099
Conformity to masculine norms			0.608 (0.163) ***	0.090	0.609 (0.163) ***	0.090	0.610 (0.163) ***	0.090
Anti-egalitarianism			0.210 (0.079) **	0.064	0.212 (0.079) **	0.064	0.212 (0.079) **	0.064
Same-level / Cross-level interaction								
Decriminalized × No-trafficking					0.447 (0.123) ***	0.058	0.448 (0.124) ***	0.058
Decriminalized × No-pimping					0.437 (0.154) **	0.056	0.442 (0.154) **	0.057
Decriminalized × Prostitution is violence							−0.520 (0.136) ***	−0.070
Constant	2.084 (0.116) ***		0.752 (0.485)		0.964 (0.488) *		0.825 (0.489) †	
Random intercept								
SD(constant)	3.023 (0.097)		2.742 (0.095)		2.735 (0.095)		2.718 (0.094)	

Table 2 (continued)

Variables	M1 B (SE)	M1 b	M2 B (SE)	M2 b	M3 B (SE)	M3 b	M4 B (SE)	M4 b
Random slopes								
SD(Decriminalized)	1.428 (0.083)		1.429 (0.083)		1.438 (0.083)		1.402 (0.083)	
SD(No-trafficking)	1.288 (0.084)		1.295 (0.084)		1.288 (0.083)		1.290 (0.083)	
SD(Indoor)	0.827 (0.101)		0.829 (0.101)		0.848 (0.098)		0.842 (0.099)	
SD(No-pimping)	1.205 (0.097)		1.202 (0.098)		1.184 (0.098)		1.178 (0.098)	
SD(Residual)	1.336 (0.039)		1.335 (0.039)		1.327 (0.039)		1.328 (0.039)	
AIC	18265.22		17911.42		17905.40		17895.34	
Conditional ICC	0.837		0.808		0.810		0.807	
N Vignettes (Observations)	3988		3988		3988		3988	
N Respondents (Groups)	997		997		997		997	

Note. Models estimated using robust restricted maximum likelihood method. B estimated coefficients, SE standard errors, b standardized coefficients, AIC Akaike's information criteria, ICC intraclass correlation. All random slopes are statistically significant at a 0.05 significant level. Random effects: correlations estimated but not shown. P-values: $^{†}p<0.10$; $^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$
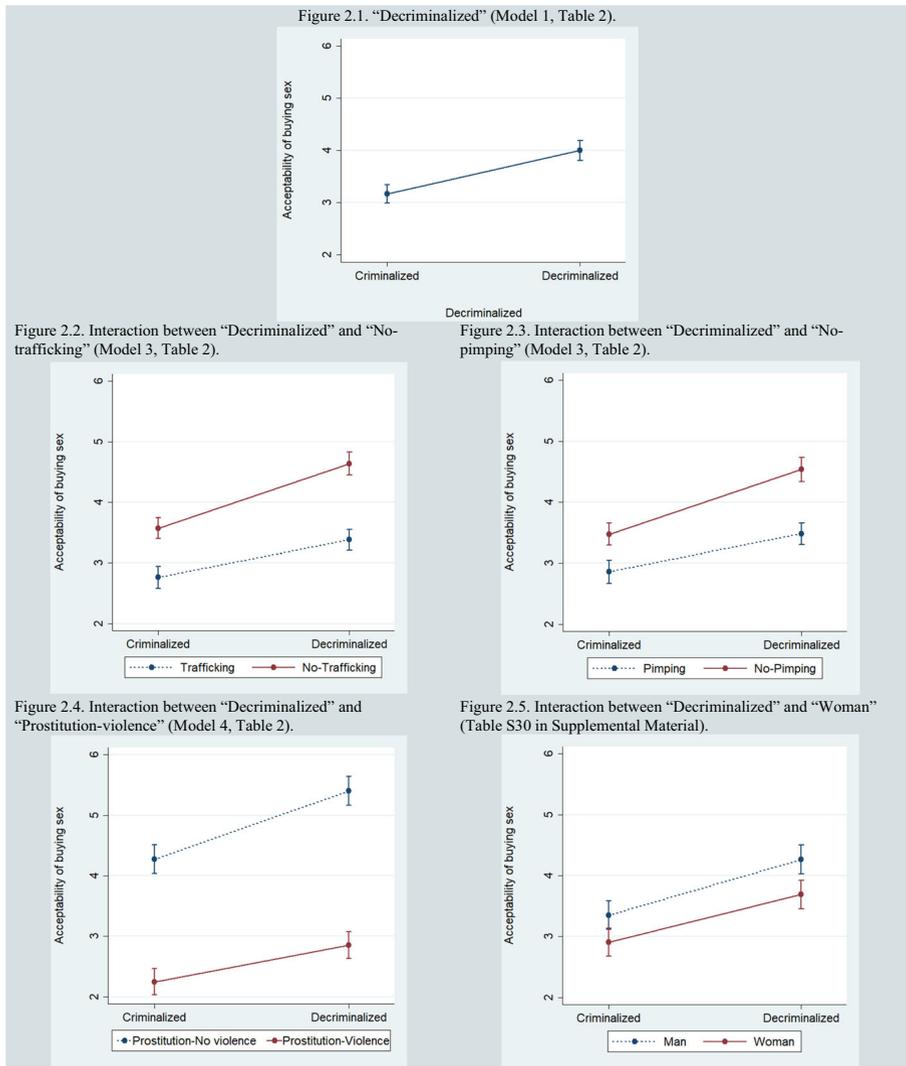
Figure 2.1. "Decriminalized" (Model 1, Table 2).

Figure 2.2. Interaction between "Decriminalized" and "No-trafficking" (Model 3, Table 2).

Figure 2.3. Interaction between "Decriminalized" and "No-pimping" (Model 3, Table 2).

Figure 2.4. Interaction between "Decriminalized" and "Prostitution-violence" (Model 4, Table 2).

Figure 2.5. Interaction between "Decriminalized" and "Woman" (Table S30 in Supplemental Material).

Fig. 2 Predictive margins for acceptability of buying sex

We also considered, in an exploratory way, the interactions of Decriminalized with the Indoor and Empower dimensions and no statistically significant results were obtained for either of these (for that reason, we did not introduce these interactions in the models estimated in Table 2).

To test hypothesis 3 (when respondents believe that prostitution is not a form of violence, the effect of decriminalization on the acceptability of buying sex is stronger), the interaction between Decriminalized and Prostitution-violence is added in model 4 of Table 2. The coefficient obtained is negative and statistically significant ($b=-0.070$, $p<0.001$). Therefore, hypothesis 3 is confirmed: those who think that prostitution does not always have to be a form of violence are less likely to categorically reject

prostitution and their judgments are more dependent on the situations shown in the vignettes regarding the legal status of prostitution (see Fig. 2(4)).

Finally, as can be seen in models 2, 3 and 4, the dichotomous variable Woman has a negative effect on acceptability of buying sex. For example, in model 4, we obtain: $b=-0.076$, $p<0.001$. This means that the first part of hypothesis 4 is fulfilled: The acceptability of buying sex is lower among female than among male respondents. Furthermore, we estimated model 4 for the subsamples of women and men. The results are shown in Table 3 and Fig. 3. The coefficient obtained for Decriminalized is higher for men ($b=0.114$, $p<0.000$) than women ($b=0.078$, $p<0.05$) (see also Fig. 2(5)). However, this difference is not statistically significant, according to the significance test obtained for interaction Decriminalized*Woman ($b=-0.036$, $p=0.382$) in a pooled interaction model (Table S30 in Supplemental Material). This means that the second part of hypothesis 4 is not confirmed.

Discussion

Our experimental research shows that the legal framework for prostitution can influence the moral judgments individuals make about purchasing sex. Various descriptions of hypothetical scenarios about prostitution in Spain were presented to the respondents to elicit them to form judgements about the acceptability of purchasing sexual services (by a man from a woman) in each of these scenarios. The most important dimension for this study was the existence of two possible opposing regulatory frameworks: the decriminalization of prostitution and the criminalization of the client. When prostitution was hypothetically decriminalized, the mean score obtained for the dependent variable acceptability (3.99, on a scale of 0–10) was 26% higher than it was when buying sex was hypothetically criminalized (3.18). In an experimental and artificial environment like ours, we believe that there are two mechanisms that may be operating to explain this influence of the legal framework, as pointed out by Bilz and Nadler (2009). First, the mechanism related to the informational influence of the law, which can be considered as a heuristic process, in the sense that we rely on the nature of the message source (the legal system) to make a quick judgment about the persuasiveness of the information ("if the legal system considers that purchasing sex is something that must be criminalized, then purchasing sex is wrong"). Second, the mechanism related to group identification: if people believe that legal codes generally map onto the community's moral norms then the law can influence the construction of their own moral judgments ("if the legal system considers that purchasing sex must be criminalized, this means that the majority of the population thinks that purchasing sex is wrong").

The result just noted is consistent with the result obtained by Immordino and Russo (2015). The findings of this study were based on comparing samples from countries with different prostitution regimes, using the method of instrumental variables in order to estimate causal relationships. We managed to obtain similar results in our research, using a sample from a single country and a series of hypothetical situations (vignettes) regarding prostitution.

The previous result is moderated by the context shown in the vignettes. When this context establishes that levels of trafficking and pimping are low, then the legal

Table 3 Multilevel regression for Acceptability of buying sex (random intercept and slopes model). Subsamples of men and women

Variables	M5 (Men)		M6 (Women)	
	B (SE)	b	B (SE)	b
Vignette dimensions				
Decriminalized	0.782 (0.216) ***	0.114	0.480 (0.220) *	0.078
No-trafficking	0.844 (0.128) ***	0.123	0.758 (0.118) ***	0.123
Indoor	0.245 (0.082) **	0.036	0.220 (0.076) **	0.036
No-pimping	0.662 (0.144) ***	0.097	0.500 (0.129) ***	0.081
Empower	0.020 (0.096)	0.003	0.199 (0.085) *	0.032
Respondent characteristics				
Prostitution is violence	−2.042 (0.255) ***	−0.296	−2.025 (0.221) ***	−0.317
Income more than €2000	0.311 (0.240)	0.041	0.641 (0.228) **	0.086
Economic liberalism	0.161 (0.040) ***	0.135	0.069 (0.034) *	0.064
Conformity to masculine norms	0.751 (0.237) **	0.112	0.353 (0.225)	0.050
Anti-egalitarianism	0.167 (0.122)	0.049	0.246 (0.101) *	0.079
Same-level / Cross-level interaction				
Decriminalized × No-trafficking	0.531 (0.173) **	0.066	0.465 (0.157) **	0.066
Decriminalized × No-pimping	0.341 (0.233)	0.042	0.639 (0.211) **	0.089
Decriminalized × Prostitution is violence	−0.512 (0.208) *	−0.062	−0.479 (0.196) *	−0.073
Constant	0.244 (0.686)		1.160 (0.629) †	
Random intercept				
SD(constant)	2.775 (0.130)		2.263 (0.117)	
Random slopes				
SD(Decriminalized)	1.598 (0.132)		1.568 (0.124)	

Table 3 (continued)

Variables	M5 (Men)		M6 (Women)	
	B (SE)	b	B (SE)	b
SD(No-trafficking)	1.062 (0.143)		1.239 (0.119)	
SD(Indoor)	0.817 (0.160)		0.676 (0.166)	
SD(Empower)	1.078 (0.159)		0.575 (0.259)	
SD(Residual)	1.414 (0.057)		1.352 (0.053)	
AIC	8957.52		9081.40	
Conditional ICC	0.794		0.737	
N Vignettes (Observations)	1948		2040	
N Respondents (Groups)	487		510	

Note. Models estimated using robust restricted maximum likelihood method. *B* estimated coefficients; *SE* standard deviation in parentheses; *b* standardized coefficients; *AIC* Akaike's information criterion; *ICC* intraclass correlation. All random slopes are statistically significant at a 0.05 significant level. Random effects: correlations estimated but not shown. *P*-values: † *p*<0.10; **p*<0.05; ***p*<0.01; ****p*<0.001
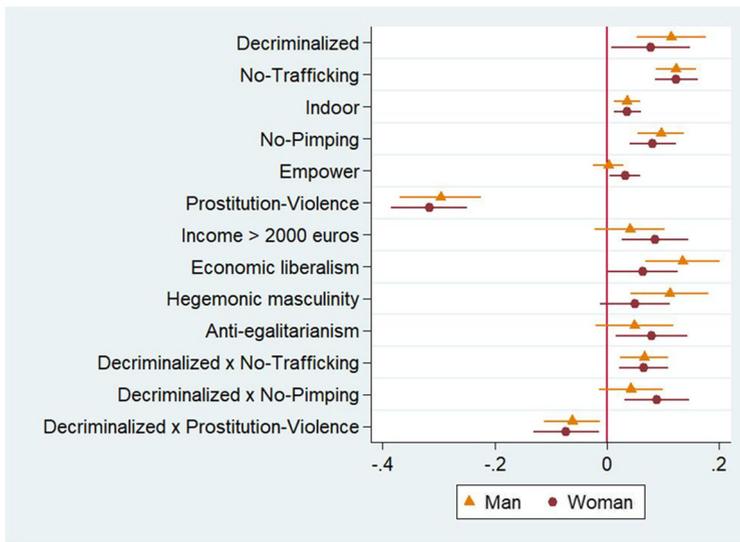
Fig. 3 Multilevel regression (model 4) for acceptability of buying sex. Standardized coefficients estimated for the subsamples of men and women (Table 3)

framework has a considerably greater influence on the acceptability of buying sex. If the levels of trafficking and pimping are low, the average acceptability score obtained is 38.7% higher in the decriminalization scenario than in the scenario where the client is criminalized. In contrast, if trafficking and pimping levels are high, this average score is only 18.9% higher in the decriminalization scenario than in the scenario where the client is criminalized. Indeed, when it is assumed that there is a high risk of sex workers being abused (high levels of trafficking and pimping), respondents tend to be more likely to categorically reject men buying sexual services from women, so we see a lower sensitivity in their responses to the proposed legal framework.

The personal characteristics of the respondents may also have a moderating effect. This is the case for respondents who think that prostitution does not always have to be a form of violence (compared to those who think that it is). Respondents who do not think that prostitution is a form of violence are less likely to categorically reject prostitution, and therefore their judgements are more dependent on the scenarios regarding the legality of prostitution shown in the vignettes. Regarding the sex of the participants, it is not surprising to see that the acceptability of buying sex is much lower among female respondents (average score of acceptability=2.93) than male respondents (average score of acceptability=4.26). This difference is in line with the literature (Meneses et al. 2018), although in our case, the size of this difference is influenced by the fact that in the formulation of our dependent variable we made the genderization of prostitution more salient. However, although it seems that the effect of the decriminalization of prostitution on the acceptability of buying sex is greater among men than women, this difference is not statistically significant.

The present research exhibits some limitations, derived both from using hypothetical and unreal situations and from the simplifications introduced in our experimental design. Regarding the second, several improvements and extensions can be made to

our research for future studies. The distinction between female and male prostitution could be included. More levels could be included in the "legal framework" dimension; for example, a third level could be added that includes the regulatory model of "full criminalization" (where both the sale and purchase of sex are punished); or the regulation that exists in the country could be included as a control group. Samples from countries with different legal regimes could be used (it would be particularly interesting to know what result would be obtained in Sweden, the country most representative of the Nordic model). Or, with a larger sample size, the effect of the respondents' sexual orientation could be considered.

In this research, based on a novel quantitative methodology, we have tried to confirm that the law can have a symbolic impact on the moral judgments of individuals, in line with the literature on law, psychology and morality (Bilz and Nadler 2009). In addition, we have provided new causal empirical evidence in support of the idea that the two proposed regulatory frameworks for regulating the sex trade—the decriminalization of prostitution and the criminalization of the client—may not be neutral from the point of view of their impact on the acceptability of buying sex, a result that may have important policy implications.

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