



**Religion and Tradition in
Conflict
Experimentally Testing the
Power of Social Norms to
Invalidate Religious Law**

**Christoph Engel
Klaus Heine
Shaheen Naseer**





Religion and Tradition in Conflict Experimentally Testing the Power of Social Norms to Invalidate Religious Law

Christoph Engel / Klaus Heine / Shaheen Naseer

May 2021

Religion and Tradition in Conflict Experimentally Testing the Power of Social Norms to Invalidate Religious Law*

Christoph Engel / Klaus Heine / Shaheen Naseer

Abstract

Often, religion, law and tradition co-evolve. Religious precepts shape social practice, which translates into law. Yet this harmony is not universal. The Sharia guarantees daughters their share in the family estate. Yet in Pakistan, this rule clashes with tradition. While the country was jointly governed with (mainly Hindu) India, it had been customary that the entire estate goes to the eldest son. Combining a survey with a lab in the field experiment, we show that this is still the descriptive and the injunctive norm. Yet participants have a strong preference for the conflict to be dissolved by legislative intervention.

Keywords: religious norm, legal rule, descriptive and injunctive social norm, inheritance, gender discrimination, Sharia, experiment

JEL: C91, C93, D01, D15, D31, D63, J16, K00, O12, O53, R22

* Helpful comments on an earlier version by Rima Rahal and Mahdi Khesali are gratefully acknowledged. The experiments have been financed from the regular budget of the Max-Planck-Institute for Research on Collective Goods, Bonn.

1. Research Question

Religion and tradition often go in sync: over time, the religious precept translates into social practice. Following the precept is not only customary, but also expected. Not as an article of faith, but as the fabric of society. But religion and tradition are not always in harmony. We use experimental methods to investigate a patent conflict between a clear religious rule, backed up by formal legislation, and tradition that wishes otherwise.

Specifically we exploit the fact that predominantly Muslim Pakistan has a joint past with predominantly Hindu India. The *Quran* mandates:

“Men shall have a share in what parents and kinsfolk leave behind, and women shall have a share in what parents and kinsfolk leave behind” (Quran 4:7).

Violating this command is regarded as a sin. *Sharia* translates this into the following rule: 2/3 of a parent’s property is shared equally among the sons, and 1/3 among the daughters (Surah An-Nisa; 4:11-14). It is not shared equally between sons and daughters as daughters are expected to marry, and will then also participate in their husband’s wealth. For inheritance, Pakistani state law refers to the *Sharia*. A parent cannot alter the distribution by writing a will. If he or she does, the clause in the will is invalid (Kimber 1998, Pearl and Menski 1998)

Sharing property with daughters however clashes with the patriarchal Hindu tradition. In this tradition, no property goes to daughters. Technically, this is achieved by constituting the assets, and land in particular, as ancestral or joint family property. Upon the death of the father, governance is devolved to the eldest son, with no application of inheritance rules (Rule 6 [Indian] Hindu Succession Act 1956, Gazette 1956 No 38).¹

In Pakistan, it is customary to achieve a similar outcome by having daughters sign, upon the death of their father, that they give their legal share to their brothers by way of “gift”. Were they to go to court, daughters would receive the share stipulated in the *Sharia*. This is well known in the population. Yet there is strong social pressure not to exercise this right. If a daughter were to sue, she would risk being shunned by her family. It is reported that daughters next to never receive anything (Jawad 1998, Nelson 2011, Siddique 2013). Social norms are said to override the religious rule, and the law.

With the help of a laboratory experiment in the field with Pakistani participants we test whether tradition overpowers religion. In a vignette, we ask male participants whether they would request from a sister that she foregoes her inheritance right. We ask female

¹ Some Indian states have abolished this option. Yet parents tend to override these reforms by “gifting” their property to their sons while still alive (Roy 2015).

participants whether they would fulfil such a request. This part of the experiment gives us quantitative evidence on the degree by which the social norm overrides the religious rule. Yet self-report data may not be fully credible. We add credibility by a second part of the experiment. Participants are randomly matched with another (male or female) participant, and may punish this participant for the choice she has made (to follow the religious rule, or the social norm). The social norm may have force as it is descriptive, as it is prescriptive, or both. As a measure of descriptive norms, we elicit beliefs about decisions (to ask for / accept the request to override the legal entitlement). As a measure of prescriptive norms, we elicit beliefs about punishment choices. We further administer a series of indicators for participants' attitudes, and collect rich demographic data.

A very large majority of both male and female participants report that they would follow the norm, and circumvent the religious rule. This is also what both males and females expect. Females who reject the request are severely punished, as are males who do not ask for circumventing the Sharia. This too is expected, both by males and females. Still we do not find that social practice straight out dominates the religious precept. Participants also punish others if they have followed the social norm, and they expect others to do so as well. Their own choice, and their decision to punish others, are inconsistent. We run a second survey, with participants from the original experiment, to explain this finding. Results can partly be explained by a disconnect between personal and social norms. What participants believe is appropriate for their own family is not what they wish to be social practice. But the decision to punish others for following the social norms is also negatively associated with a preference for legal reform to the benefit of daughters, and with ambiguity tolerance. This suggests that participants sense the conflict between the religious rule and the law on the one hand, and social norms on the other hand, and desire the conflict to be removed by legislative intervention. Yet as long as this has not happened, they do not want to hold the normatively undesired outcome against the individual bringing it about.

The remainder of the paper is organized as follows: Section 2 locates the paper in the literature. Section 3 introduces the design of the (main) experiment. Section 4 reports results. Section 5 concludes.

2. Literature

The interaction between religious rules, laws and social norms is complex. An individual's decision to choose between (religious or legal) rules and social norms is essentially balancing social risks, monetary incentives and social rewards. In situations where rules and social norms complement each other, agents follow norms to signal their intrinsic types to others, and rules interact with this signaling role of norms (Posner 1997, Cooter 1998, Ellickson 1998, Posner 2002, Zasu 2007, Benabou and Tirole 2011). In cases where rules are in conflict with the strongly held beliefs and social norms prevalent in a society, rules may remain "in the books". Social norms may

lead to a significant decline in law enforcement (Fleming 1999, Anomaly and Brennan 2014, Acemoglu and Jackson 2017, Acemoglu, Cheema et al. 2018). Such conflicts are particularly likely, and acute, if the preferences of privileged and disadvantaged groups are antagonistic and social norms benefit a privileged category of citizens (Aldashev, Chaara et al. 2012).

While the theory is thus well developed, empirical evidence about social norms counteracting rules is still scant. Kube and Traxler (2011) use a lab experiment to investigate the interplay between laws and social norms. They show that compliance with a legal rule increases if the behavior is additionally sanctioned by a social norm. Using a lab-in-the-field experiment in Ethiopia, Cecchi and Melesse (2016) show that customary arbitration discriminates against women. Women do not take advantage of formal laws that are more in their favor to negotiate a more favorable outcome. By contrast Bursztyn, González et al. (2018) use an experimental survey to study female labor force participation in Saudi Arabia. Male experimental participants support female labor force participation and underestimate the normative beliefs of their neighbors that are guided by more restrictive social norms. Finally Rao (2007), Rao (2017), using macro level data, report that a legal right makes it more likely that Indian women own land, although they rarely go to court.

The rationale behind excluding women from inheritance seems to be three-fold. First, there is the belief that women get dowry which compensates them for giving up their inherited share (Anderson 2000, Makino 2019). Second, if women are included in inheritance, this leads to a fragmentation of property, some of which goes to the in-law's families of the daughter/sister (Holden and Chaudhary 2013, Roy 2015, Bhalotra, Brulé et al. 2018). Third, as the parents tend to spend the rest of their lives with their sons, they prefer to keep the inheritance with the sons (Ali 1997, Anderson and Bidner 2015).

The present study investigates a conflict between social norms (inherited from the joint past with Hindu India) and religious law, which is the law of the land in Pakistan. The country has been ranked 153rd out of 156 countries in terms of gender equality.² In Pakistan, 96.28% of the population are Muslims.³ Pakistan has the second largest number of Muslims (199 Million)⁴ in the world, after Indonesia.

After the formation of Pakistan in 1947 as an "Islamic Republic", the country embraced Shariah laws in family matters (Serajuddin). The Muslim Personal Laws Act 1937, followed by Muslim Family Laws Ordinance 1961, take their inspiration from Shariah and favor the inheritance rights of women (married and unmarried). The inheritance laws in Pakistan clearly define the inheritance rights of Muslim women according to the Islamic Laws of Inheritance known as "*ilm al-fara'id*", or science of ancestral share (Coulson 1963). Islamic doctrine and jurisprudence are very clear regarding property ownership and inheritance of women (Abdalati 1993: 187). The distribution of inheritance according to the Islamic principle of "fixed share for entitled heir" (e.g. wife, mother, sister or daughter) goes back to the Prophet having said that the knowledge

² Global Gender Gap Index 2021, http://www3.weforum.org/docs/WEF_GGGR_2021.pdf.

³ <https://www.pbs.gov.pk/sites/default/files//tables/POPULATION%20BY%20RELIGION.pdf>.

⁴ Taking population size from the 2017 census, https://www.pbs.gov.pk/sites/default/files//population_census/National.pdf.

of inheritance is half of the knowledge of the religion (Anderson 1965: 349). The Constitution of 1973 broadly speaking also protects women's inheritance. The Prevention of Anti-Women Practices (Criminal Law Amendment) Act, 2011 specifically prohibits women's disinheritance in sections 498 A and 498 C (Weiss 2014).

The Muslim law of inheritance takes its inspiration and authority directly from the Quran (see, chapter four, verses, 07, 11, 12, 176), and is considered as the most progressive law in Islamic jurisprudence (Coulson 1963, Pearl and Menski 1998). The two Muslim sects (e.g. Sunni and Shia) have different interpretations and practice of the law of succession. For example, Shias allow a much larger share to women as compared to Sunnis. In Pakistan, about 85% of the Muslims are Sunni, which is why we focus on their interpretation. Throughout this study we shall take the interpretation of Sunni law of succession in Islam, and assume that the deceased has died intestate (for detail see Carroll 1983).

The issue of inheritance occupies a central position in Pakistan's legal system: on average some 57.5% of the court cases involve inheritance and property disputes, with an average length of more than a year (Siddique 2013). Yet it is estimated that 80% of all women in Pakistan do not claim any inheritance rights (Ahmad 2010). The custom of female disinheritance took shape in colonial Punjab (1849-1947) and was legally protected as "Customary Inheritance Laws". It endured after the formation of Pakistan in 1947. While India enacted the Hindu Succession Act 1956 to abolish the customary practices, in Pakistan the movement to shun customary laws has been much less active (Nelson 2011). These social norms of disinheriting women emerged from path dependent (or historically contingent) customary laws and practices commonly prevalent in colonial India (Patel 1979, Agarwal 1994, Agarwal 2002, Basu 2005, Nelson 2011).

In other countries, the situation is similar. Countries like India (Deininger, Goyal et al. 2013), Indonesia (Carranza 2012), Sumatra (Quisumbing and Otsuka 2001) or Ghana (La Ferrara and Milazzo 2017) have reformed their inheritance laws, with the intention of increasing justice between boys and girls. Yet most females do not turn to formal institutions for matters pertaining to marriage, property and inheritance and instead rely on customary rules (Sandefur and Siddiqi 2013) which are culturally transmitted, and operate under communal norms rather than the notions of individual rights (Acemoglu, Cheema et al. 2018).

Involuntary disinheritance primarily results from efforts of men to circumvent the inheritance laws through the perpetuation of customary practices, to avoid fragmentation of land. There are several ways in which the inheritance law regarding landed property is side-stepped. Women often voluntarily give away their fair share in favor of the male heirs in the family (Rauf 1987, Shinwari 2015). In some cases, women are compensated in cash. In other cases, women are completely denied of any share in inheritance on the grounds that they received it in the form of dowry at the time of their wedding. Even if women receive legal title to their inherited land, possession may

still remain with their brothers who enjoy the returns from the land. Even when women do receive entitlement to land as well as its possession, their property is still managed by male family members due to the observance of "Purda" (face covering) by females (Ahmad, Bibi et al. 2012). It has to be noted though that women sometimes voluntarily choose disinheritance, for instance because they think that their share is safe with their brothers, but not when transferred in their names, because then the husband might appropriate it (Korson 1971, Mehdi 2001).

3. Study 1

a) Design

The research question could not meaningfully be tested in an experiment that removes social context. Inheritance laws differ across legal orders, as do inheritance practices and normative convictions. Merely recording who takes ownership upon the death of a person would not inform us about the differential effect of religious rules and social norms. We get this information from a vignette that makes the conflict between religious rules and social norms salient. For male participants, the vignette reads:

Assume you have grown up in a Muslim family with one sibling of opposite sex. Your father has not made a will. According to Islamic law of inheritance you are entitled to 2/3 of your fathers' property. Your sister is entitled to 1/3 of the property. Would you explain to your sister that many families prefer to keep the property with the sons? To that end, would you prepare a document in which your sister declares to transfer her share of property to you? Would you ask her to sign the document?

For female participants, it reads:

Assume you have grown up in a Muslim family with one sibling of opposite sex. Your father has not made a will. According to Islamic law of inheritance you are entitled to 1/3 of your father's property. Your brother is entitled to 2/3 of the property. Your brother points to the fact that many families prefer to keep the property with the sons. To that end he asks you to sign a document in which you declare to transfer your share of property to him. Would you sign the document?

If female participants declare that they would accept the request, they may be motivated by their conviction that this is the right thing to do, but they may also feel under pressure from their families, and from their brothers in particular, who stand to gain from implementing the social norm. The threat with social sanctions could be heightened if female participants were to decide in the presence of male participants. They might even be concerned that, after they have completed the experiment, male participants interrogate them and express disdain, if not take action, were they to

admit that they have declared they would reject the request. To exclude that the data is contaminated on this channel, we have split sessions such that they were either male only or female only events.

When they take the survey, participants only know that the experiment has further parts, not what these parts are about. This way we can be sure that responses to the vignette are not influenced by the anticipation of potential consequences.

As any vignette, the first part of the experiment only gives us self-report data. The choices participants make are merely hypothetical. To increase internal validity, and in particular the credibility of the findings, following the tradition of experimental economics, the next parts of the experiment are incentivised.

In the second part of the experiment, we elicit descriptive beliefs. After all sessions have been completed, and separately for each participant, 20 male and 20 female participants are randomly selected. We ask participants how many of these other participants they believe have declared that they would ask for the entire property (males) or have declared that they would fulfil the request (females). If the participant gets either number exactly right, she additionally earns 100 PKR, on top of 350 PKR for participating in the experiment. If the respective estimate is one above or below the true number, she additionally earns 60 PKR. If the estimate is 2 above or below the true number, she additionally earns 30 PKR. If the estimate is 3 above or below the true number, she additionally earns 10 PKR.

The third part of the experiment is meant to convey credibility to hypothetical choices. To that end, each participant receives two additional endowments: 600 PKR to keep if they are not reduced by another, anonymous participant engaging in costly punishment; and 200 PKR to keep unless they use part or all of this endowment for punishing another anonymous participant. The fine to fee ratio is 3:1. Hence when using 1 PKR for punishing their anonymous counterpart, the (first) endowment of the counterpart is reduced by 3 PKR. In this part of the experiment, we use the strategy method (Selten 1967). Participants know that they will be either matched with a male or a female participant, and that this participant may either have made or not made (male) the request, or either have accepted or rejected the request (female). Hence from each participant, we have four punishment choices. We implement the one that corresponds to the gender and hypothetical choice of the randomly matched other participant.

In the fourth part of the experiment, we incentivize beliefs about the punishment choices made by the same 20 randomly selected male and female participants. Hence from every participant we elicit eight beliefs, regarding a male or a female counterpart who has reacted to the hypothetical choice made by a yet unknown male or female participant who has either requested/accepted that the religious rule be overruled, or who has not made this request/rejected the request. For each of these eight situations

we ask participants to indicate the estimated mean punishment, meted out by the randomly selected 20 male or female participants, respectively. If their estimate is no further away than 2 PKR from the true average, for this question they additionally earn 25 PKR. If the estimate is no further away than 5 PKR from the true average, they additionally earn 15 PKR. If the estimate is no further away than 10 PKR, they additionally earn 5 PKR.

In conclusion, we ask participants to respond to a series of survey questions, regarding their attitudes, and giving us fine-grained demographic information. For detail we refer to the instructions in the appendix.

We ran the experiment in collaboration with Gallup Pakistan. Gallup randomly selected 204 participants from their pool of approximately 1000 participants. A total of 19 sessions (10 female only, 9 male only) were run at Gallup's premises in Lahore and Karachi in September and October 2020. Participants on average earned \$5. We had expected that participants would make less use of the punishment option than some of them actually did, both in the active and in the passive role. 22 participants would not have received their show up fee. Gallup was concerned that this would make it difficult, in the future, to run incentivised experiments. This is why we have informed these participants about calculated results, but have left them with the full show up fee regardless. Table 4 summarizes demographic characteristics of the sample.

We made multiple efforts to make sure that participants understand the design of part 2 – 4, i.e. beliefs about hypothetical choices, punishment, and beliefs about punishment. We first explained the respective part of the experiment in the abstract. Then participants saw pictorial representations of examples. Finally they had to answer control questions. They were only allowed to continue once they had answered the respective questions correctly. If they had difficulties, or other questions, they could contact a monitor.

The experiment received IRB approval from the German Association for Experimental Economic Research.⁵

b) Results

Overruling the Law If the social norm overrules the law, we should find that, in the hypothetical, male participants request full ownership of the family estate upon their father's death. As the left panel of Figure 1 shows, the overwhelming majority indeed does so. 80.58% of male participants indicate that they would ask their sister to transfer their legal share to them by way of a deed. If we take our sample as representative for the population, at the conventional 5% level we can exclude that this

⁵ GfeW Document 2Ef2XqkN of June 2, 2020.

share is below 70.87%.⁶ More than two thirds would attempt at circumventing the law. This is all the more noteworthy as we have tested a well-educated, young sample. If we could have tested parts of the population that can be expected to be more traditional, this fraction could well have been even higher.

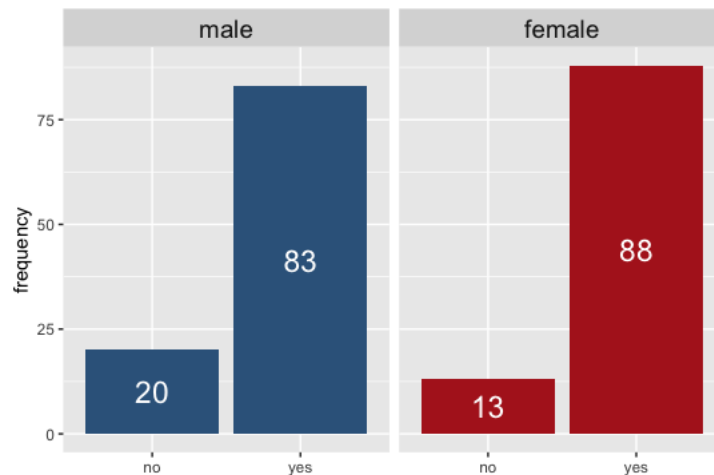


Figure 1
Hypothetical Decisions

Male participants could simply prefer the solution that makes them financially better off. For our research question, the hypothetical choices of female participants are therefore even more important. If they participate in circumventing the law, it is to their own disadvantage. As the right panel of Figure 1 shows, they overwhelmingly do. Actually, descriptively they are even more likely to accept the request than male participants are likely to make the request: 87.13% of them do.⁷ If we again interpret our sample as representative, we can exclude that the fraction of women in the population accepting such a request is below 80.20%. We cautiously conclude

Result 1 Religious Law in the Books: For more than two thirds of the population of Pakistan it can be predicted that the rule of the Sharia mandating that daughters receive 1/3 of the estate upon their father's death will be circumvented.

Support for the Social Norm Self-report data suffers from a weakness. Since decisions are only hypothetical, survey participants might not take them seriously enough. They might want to tell the experimenter what they believe the experimenter to be after. Alternatively, they might want to use the opportunity to express support for an outcome that they would no longer bring about once it is for real. Despite the fact that we have made sure that male and female participants do not meet, they might still be

⁶ We run a series of ttests, and report the lowest number of participants (translated into a percentage for the ease of communication) at which the test does not reject at $p < .05$.

⁷ The difference between male and female hypothetical decisions is, however, not statistically significant, ttest, $p = .2055$.

concerned about social sanctions. We cannot fully rule out these concerns. There is no way to have participants decide about family wealth. But we can at least incentivise their beliefs about the statements other participants have made. This part of the experiment adds credibility, as now statements have monetary consequences.

Figure 2 shows that participants indeed expect that a fairly sizable fraction of all participants believe that other participants report their willingness to override the legal rule. Descriptively this holds for the beliefs of male participants (left panel) and for the beliefs of female participants (right panel). It also holds for the beliefs about the hypothetical decisions made by male participants (shown in blue) and for the hypothetical decisions made by female participants (shown in red).

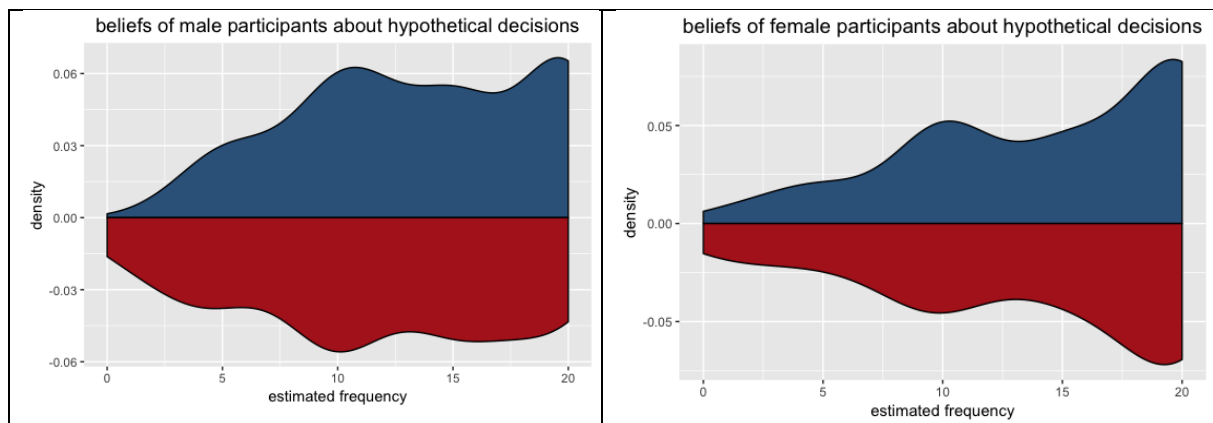


Figure 2
Beliefs about Hypothetical Decisions
 kernel density plots
 left panel: beliefs held by male participants
 right panel: beliefs held by female participants
 blue: beliefs about hypothetical choices of male participants
 red: beliefs about hypothetical choices of female participants

We use regression analysis to better understand this finding. Model 1 of Table 1 demonstrates a significant effect of the hypothetical decision that a participant has indicated herself on her belief that others would choose to circumvent the law. But the more interesting message is in the size of this effect. As the regression controls for the participant's own decision, the constant estimates the expectations of participants who themselves indicate that they would not overrule the law. Even these participants think that about one out of two participants⁸ would circumvent the law. There is a small additional effect if the participant would herself override the law. But even those who are determined to act otherwise expect the descriptive social norm to be strong.

The most interesting message of model 2 is again the size of the effect. Participants believe that males are a bit more likely to ask for overruling, compared with females fulfilling the request. But participants believe that females are almost as likely to subdue, although this deprives them of their legal share in the wealth of the family. Actually, as model 3 demonstrates, the belief is even a bit stronger in females than in

⁸ About 10 out of randomly selected 20 participants, of either gender.

males. But this gender effect is only weakly significant. Finally model 4 shows that the interaction between the object of the belief (male versus female decisions) and the subject of the belief (held by male or female participants) does no work.

Table 1: Explanations for Beliefs about Hypothetical Decisions

	model 1	model 2	model 3	model 4
hypothetical decision	2.434** (0.851)	2.434** (0.853)	2.302** (0.852)	2.302** (0.852)
belief about male decisions		1.436** (0.504)	1.436** (0.504)	1.854** (0.71)
belief by female participant			1.095+ (0.628)	1.517+ (0.805)
belief about male decisions* belief by female participant				-0.844 (1.009)
cons	11.212*** (0.779)	10.494*** (0.821)	10.063*** (0.854)	9.854*** (0.89)
N	408	408	408	408
N uid	204	204	204	204

Note: Linear model with individual random effects. Standard errors in parenthesis. *** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .1$

We conclude:

Result 2 Descriptive Social Norm: Participants believe that the majority overrides the law. This also holds if a participant would not do so herself. It also holds for female participants.

If a participant acts in line with her descriptive beliefs, she follows the crowd. Yet social norms are not only informative. They may also be prescriptive. An individual feels obliged to follow the norm. The punishment data provides a signal for this. We first look at active punishment choices. Note that this part of the experiment is designed such that not meting out any punishment is most profitable. This feature of the design makes punishment choices credible. The active punisher spends money for no other purpose than inflicting harm on another, anonymous participant. In this part of the experiment, participants may condition punishment on the hypothetical decision their anonymous counterpart has taken. Arguably if they punish a female participant who has rejected the hypothetical request to transfer her share in the inheritance to her brother, they consider this participant to deserve punishment as she has expressed the intention to violate the social norm.

As the blue area under the curve in Figure 3 shows, this reaction is indeed widespread among male participants. If we can take our sample to be a good approximation of the population, we can exclude that punishment is less than 61 (of 200) PKR.⁹ In this case, the female to whom punishment is targeted loses 183 of 600 PKR.

Now for male participants, this might be an act of solidarity with other male individuals who stand to gain if the norm is sustained. Yet as the red area under the curve shows, female participants punish other female participants nearly as severely if they do not follow the norm. We can exclude that punishment is less than 59 (of 200) PKR. Statistically the difference between punishment meted out by male and by female participants is not different from zero.¹⁰ For females, costly punishment cannot be motivated by solidarity with other females. The finding suggests that females consider the norm to be prescriptive. Others do not only follow the norm; they also should do so.

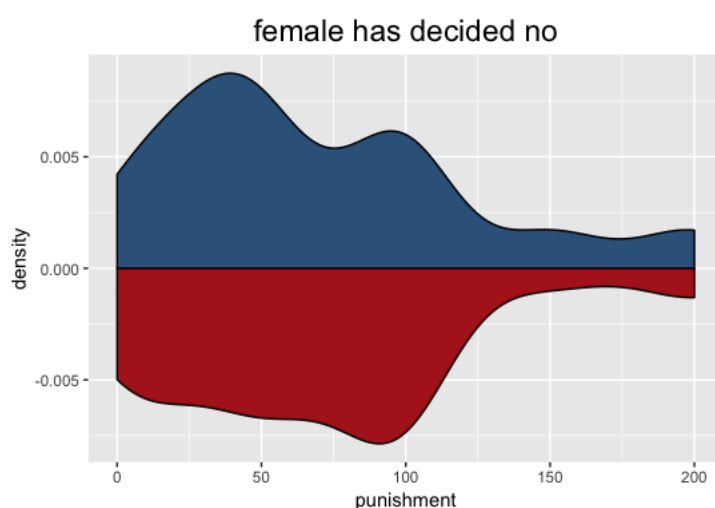


Figure 3
Punishment Meted out to Females who have Indicated they would Reject
 kernel density plots
 blue: punishment meted out by male participants
 red: punishment meted out by female participants

We conclude

Result 3 Support for the Prescriptive Norm to Transfer: Participants punish females who indicate that they would not override the law.

One might think that inheritance is a family affair. If a family is fine with splitting the estate between sons and daughters, this is none of third parties' business. Figure 4 shows that many participants think otherwise. They also punish a male participant who has indicated that he would not ask his sister to transfer the fraction of the estate that the law assigns to her. Actually males who do not ask for the transfer are not only

⁹ We again run a series of ttests, and report the lowest value at which the test still rejects at $p < .05$.

¹⁰ Ttest, $p = .7145$.

punished by other males. We can exclude that males spend less than 64 (of 200) PKR for punishment. Females punish them as well, and approximately as severely. We can exclude that they spend less than 62 (of 200) PKR for punishment. The difference between male and female choices is not significantly different from zero.¹¹ This suggests that the prescriptive social norm not only wants females to subdue, but also males to impose themselves on females.

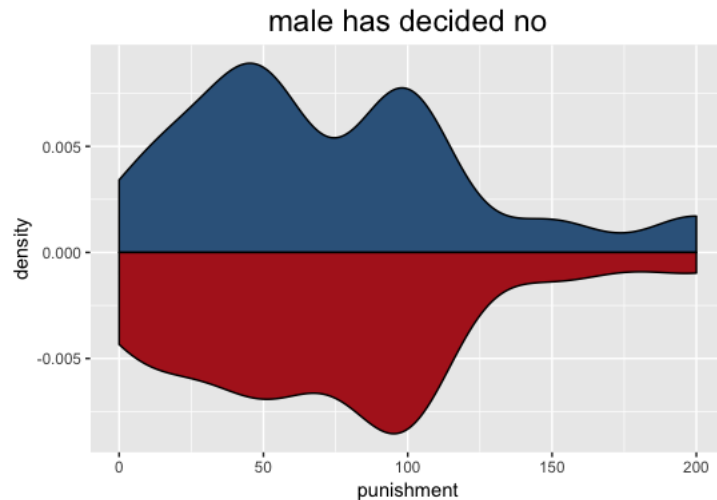


Figure 4
Punishment Meted out to Males who have Indicated they would not ask
 kernel density plots
 blue: punishment meted out by male participants
 red: punishment meted out by female participants

We conclude

Result 4 Support for the Prescriptive Norm to Ask for the Transfer: Participants punish males who indicate that they would not ask for the law to be overridden.

If a participant spends some of her own money for punishing a female who is not willing to transfer her legal share of the estate to her brother, this indicates that the participant in question herself considers the social norm to be prescriptive, and is willing to enforce it. As a complement, in the fourth part of the experiment we measure participants' beliefs about punishment choices made by other participants. Statements are incentivised to make them credible. If a participant believes that others will enforce the social norm, this suggests that she perceives the norm to be prescriptive.

As Figure 5 shows, this is indeed what we find. Actually, male participants do not only expect other male participants to punish females if they refuse to override the law. We can exclude that the expected investment in punishment is below 52 of 200 PKR. Male participants thus not only believe in males collectively enforcing a social norm that is to their advantage. Males also believe that females will enforce the norm, and

¹¹ Ttest, $p = .6495$.

approximately as severely. We can exclude that expected female investment in punishment is below 46 of 200 PKR. As the red areas under the curve demonstrate, these beliefs are not only held by male participants. Female participants hold approximately the same beliefs. We can exclude that female beliefs in punishment meted out by male participants are below 48 of 200 PKR, and that female beliefs in punishment meted out by female participants are below 46 of 200 PKR. Beliefs held by females about punishment meted out by males are not significantly different from the equivalent beliefs held by male participants.¹² Likewise beliefs held by females about punishment meted out by males are not significantly different from the equivalent beliefs held by male participants.¹³ This excludes that the beliefs by male participants are self-serving, and result from the psychological urge to justify a selfish choice (cf. Loewenstein, Issacharoff et al. 1993).

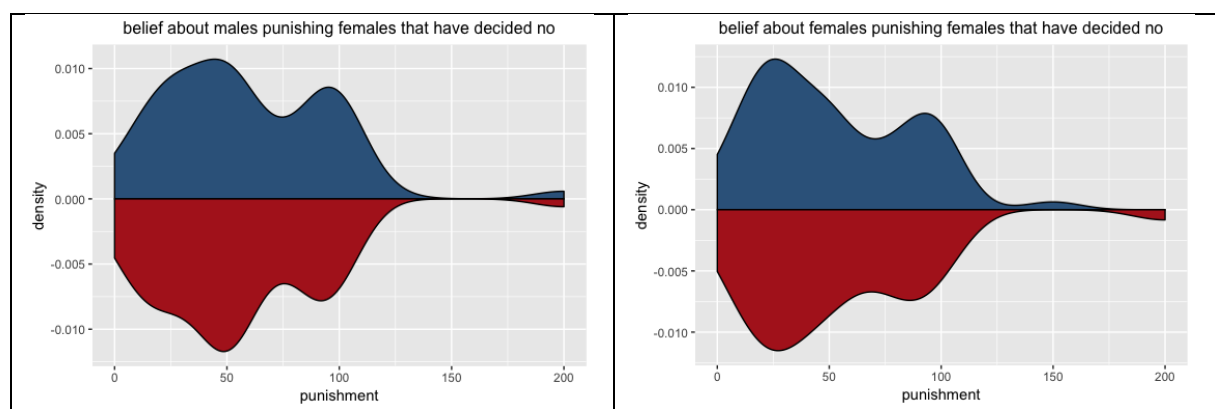


Figure 5
Beliefs about Punishment Meted Out to Female Participants Who Reject
 kernel density plots
 left panel: beliefs about punishment by male participants
 right panel: beliefs about punishment by female participants
 blue: beliefs held by male participants
 red: beliefs held by female participants

We conclude

Result 5 Perception of Prescriptive Norm to Transfer: Participants believe that other participants punish females who indicate that they would not override the law.

The punishment data has demonstrated support for the prescriptive norm that brothers should ask their sisters for a transfer that invalidates their legal right to a share in the estate. With the corresponding belief data we can test whether this is also participants' perception. As the left panel of Figure 6 shows, this is indeed what the data demonstrates. We can exclude that, on average, male participants expect other male participants to punish male participants who do not ask for the transfer with less than 61 of 200 PKR. This is the one instance where the beliefs held by female

¹² T-test, $p = .4640$.

¹³ T-test, $p = .7995$.

participants are more moderate.¹⁴ We can exclude that, on average, they expect punishment lower than 47 of 200 PKR.

In the right panel of Figure 6, we also find substantial beliefs about females punishing males who do not ask for the transfer. We can exclude that the average belief held by male participants is below 45 of 200 PKR, and the average belief held by female participants is below 44 of 200 PKR. These beliefs do not differ by gender.¹⁵

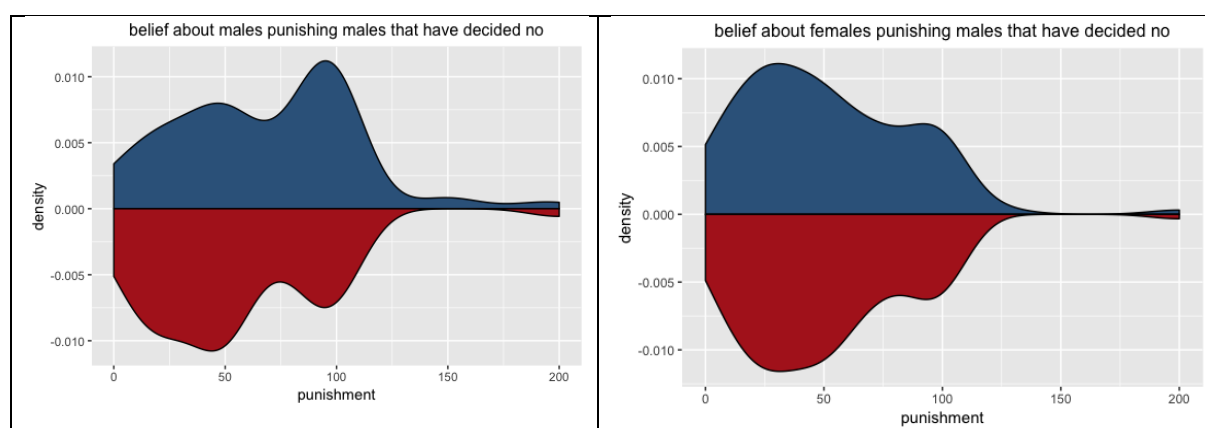


Figure 6
Beliefs about Punishment Meted Out to Male Participants Who Do Not Ask
 kernel density plots
 left panel: beliefs about punishment by male participants
 right panel: beliefs about punishment by female participants
 blue: beliefs held by male participants
 red: beliefs held by female participants

We conclude

Result 6 Perception of Prescriptive Norm to Ask for the Transfer: Participants believe that other participants punish males who indicate that they would not ask for the law to be overridden.

Conflicting Evidence Thus far, the data seems to tell a clear story. Males and females predominantly override the law. This behaviour is consistent with the descriptive beliefs of females, and with the prescriptive beliefs of males. Yet in the experiment we have also given participants the opportunity to punish males who do ask for the transfer, and females who accept the request. If it were all about following the descriptive and enforcing the prescriptive social norm, in these situations we should see very little punishment. After all, more than 80% of male and female participants indicate in the first part of the experiment that they would give priority to the social norm, not the legal rule. Yet as Figure 7 shows, participants also inflict substantial punishment on females who accept the request to transfer their legal share in the estate to their brother, and to males asking for the transfer.

¹⁴ T-test, $p = .01076$.

¹⁵ T-test, $p = .7809$.

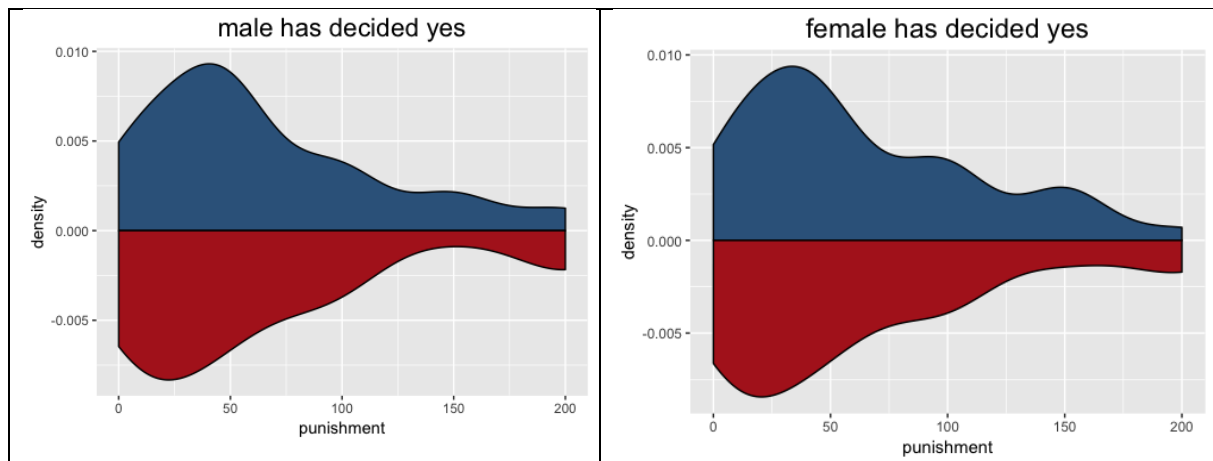


Figure 7
Punishment of Hypothetical Decisions in Line with the Social Norm
 kernel density plots

left panel: punishment meted out to male participants who have requested the transfer
 right panel: punishment meted out to female participants who have granted the transfer
 blue area under the curve: punishment choices by male participants
 red area under the curve: punishment choices by female participants

We note

Result 7 Punishment for Following the Social Norm: Participants also punish males who have asked for the transfer, and females who have granted the transfer.

Given these observations, one might be concerned that participants have not understood the design of the punishment part. We have, however, used a whole series of precautions to make sure that participants are not confused. We not only explain the design of the punishment part in the abstract. We also walk participants through multiple examples which are displayed to them in an intuitive, graphical way. Before participants are allowed to continue, they have to correctly respond to control questions.¹⁶

Further confidence in the reliability of the punishment data comes from beliefs about punishment. Recall that beliefs have been incentivised, and that beliefs about punishment inflicted on participants who insist on their legal rights, and thereby violate the social norm, are well in line with actual punishment decisions. As Figure 8 shows, so are beliefs about punishment meted out to participants who follow the social norm.

¹⁶ For detail about the instructions and control questions, please see the Appendix.

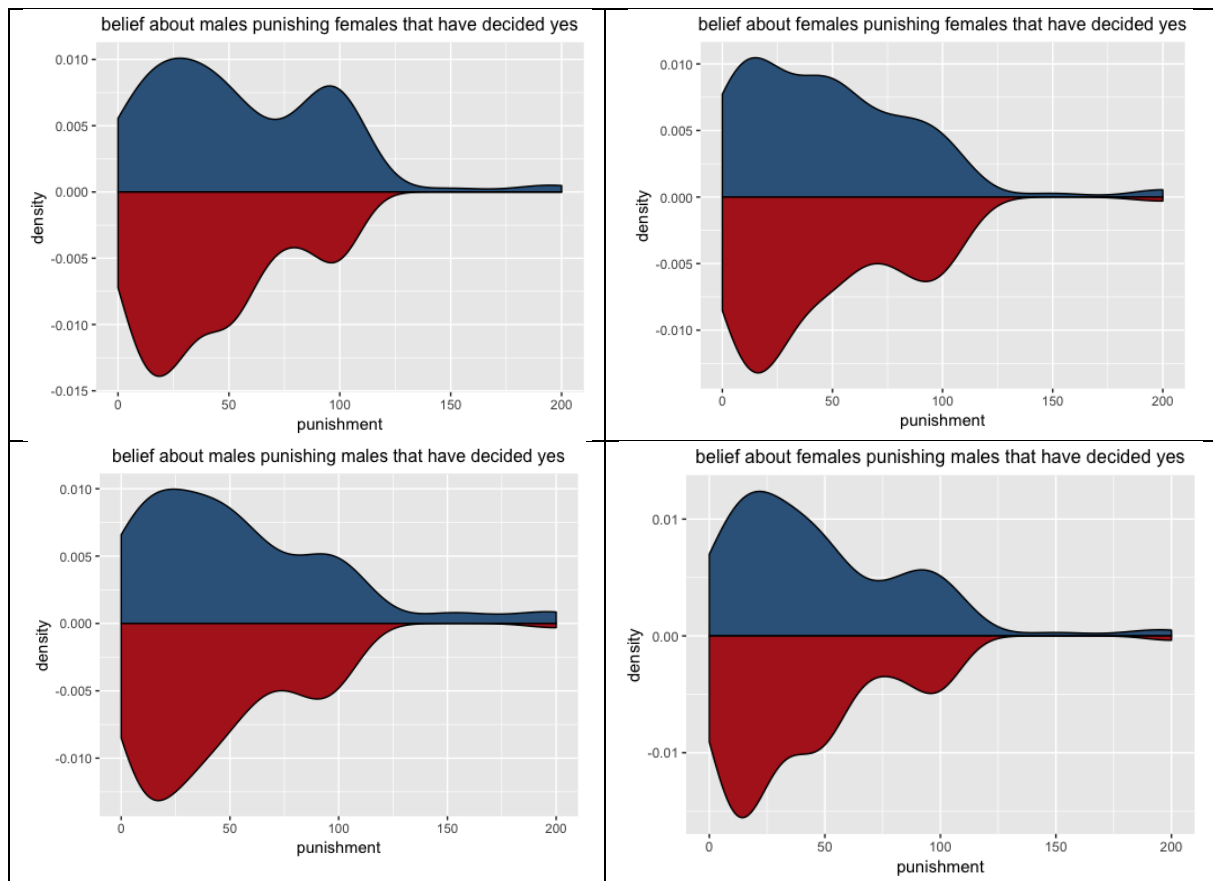


Figure 8
Beliefs about Punishment of Hypothetical Decisions in Line with the Social Norm
kernel density plots

upper row: beliefs about punishment meted out to female participants who have granted the transfer

lower row: beliefs about punishment meted out to male participants who have requested the transfer

left column: beliefs about punishment choices by male participants

right column: beliefs about punishment choices by female participants

blue area under the curve: punishment choices by male participants

red area under the curve: punishment choices by female participants

We conclude

Result 8 Expectations about Punishment for Following the Social Norm: Participants expect others to punish those who follow the social norm.

We therefore need an interpretation for the punishment of participants who follow the social norm. In principle, the reason could be heterogeneity in the (experimental, but potentially also real) population. While some participants believe in the predominance of the social norm, others believe in the predominance of the legal rule. Yet as Figure 9 shows, most of those who punish others for following the social norm follow the social norm themselves. This holds in a strict sense: very few of the bluish dots are on the $y = 0$ line. Participants also punish those who decide the same way as they decide themselves. This also holds in the opposite direction: only a fraction of the red dots are on the $x = 0$ line. Participants who do not ask / do not grant the transfer punish others who do not ask or grant either.

Conversations with participants after the experiment hint at an alternative explanation. Several female participants have approached us and told us: it has not been easy for me to decide. I completely trust and respect my brother. I would therefore not hesitate to transfer my share to him. This is why, in the first part of the experiment, I have responded that I would accept the request. But this is just my personal decision. In general, I do think that females deserve protection, and that the Sharia should be implemented. Actually this conflict may also exist in the opposite direction. An individual would not make the request, or would not give in to it, as this family holds different convictions. But the family may consider this their own affair, and may not want to put social cohesion at risk by contributing to the erosion of a widespread social norm. In a strict sense, this would require that in Figure 9 all the bluish dots are on the $x = 0$ line, and all the reddish dots are on the $y = 0$ line. This is clearly not what we find.

In a weaker sense, participants might dislike both: the decision in line with their own choice, and the decision that contradicts their own choice. If participants more strongly dislike that others decide differently, all bluish dots should be below the 45° line, and all reddish dots should be above the 45° line. This is again not what we find. If, to the contrary, participants' punishment choices are predominantly motivated by the perceived conflict between personal and social norms, all bluish dots should be above the 45° line, and all reddish dots should be below the 45° line. This is not what we find either.

Actually most participants punish both: those who follow the law (and split the estate between brother and sister), and those who follow the social norm (and keep the estate within the family, in the hands of the brother). A minority makes no difference at all, and punishes either choice as severely as the other. These choices are on the 45° line. The remaining choices are spread out to either side of the 45° line.

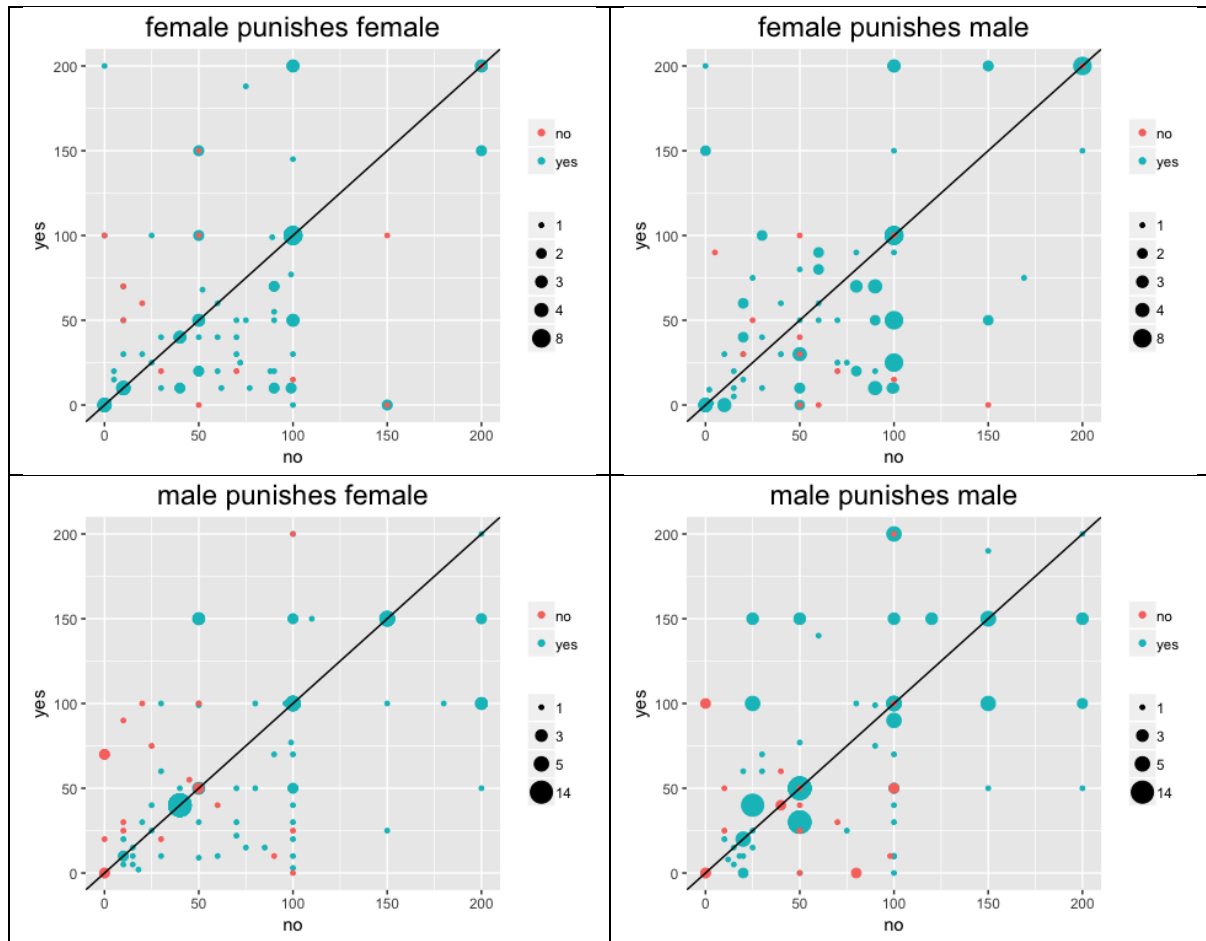


Figure 9
Punishment per Gender and Choice
 x-axis: punishment of participants who follow the law
 y-axis: punishment of participants who follow the social norm
 color: own choice: blue: punish others for following the social norm; red: do not punish them
 bubble size represents frequency

4. Study 2

a) Design

In the interest of casting further light on this result, we have exploited the opportunity to retest the same participants. Only about half of the participants in the original experiment (53 males and 45 females) have been willing to also participate in this second wave. Yet as Table 7 shows, in almost all respects, the second wave is a fair selection from the first wave.

Table 2: Descriptives Second Wave of Data Collection

	femal e	male
mandatory, range [1,5]	3.51 (1.87)	3.64 (1.82)
compensation, range [1,5]	3.71 (1.73)	3.83 (1.73)
(not) will, range [1,5]	2.2 (1.74)	2.49 (1.8)
(not) respectable, range [1,5]	2.56 (1.77)	2.4 (1.74)
(not) selfish, range [1,5]	3.69 (1.7)	4.26 (1.5)
(not) honor, range [1,5]	2.2 (1.63)	2.74 (1.88)
support for gender equality, aggregation through mean, range per item [1,5]	4.69 (0.73)	4.53 (0.81)
ambiguity tolerance, aggregation through mean, range per item [1,5]	2.19 (0.32)	2.25 (0.41)
N	45	53

Note: Likert scales, range 1:5, coded such that the higher the score the more the support for reform measures: see Appendix. Standard deviations in parenthesis

In the second wave, we asked a series of unincentivized questions. Participants knew that we would match their responses with their choices in Study 1. We conjecture that participants punish those who follow the social norm as they would want the social norm to change. To test this conjecture, we ask participants (on a 5 point Likert scale) whether they agree with three alternative changes in the law. The first change would make the rule from the Sharia mandatory, by prohibiting to implement the social norm by way of deed.¹⁷ With the second proposed change, the law strikes a balance: the father may write a will. But the will is only valid if the daughters are compensated. We also test participants on the opposite reform, which would give the father the unlimited right to write a will, and thereby would likely make the Sharia ineffective.¹⁸

¹⁷ In the first wave we had already asked: "Recently an amendment to the law has been proposed that would make it mandatory for women (sisters, daughters, mothers, wives) to receive their fair shares in inheritance. Do you support the proposal?". We add the closely related question to the second wave in the interest of comparing across potential changes in the law in one and the same instrument.

¹⁸ For the exact wording, please see the Appendix. Note that all measures are coded such that high scores stand for high support in favor of suppressing the social norm. Hence for the "will" item, a score of 5 stands for strong disagreement.

The seemingly contradictory behavior might also be motivated by conflicting attitudes. To find out, we ask participants (again using 5 point Likert scales) whether they think that “a respectable woman with integrity should fulfill the request”, “a woman who claims her share of the inheritance is very selfish” or a woman who fulfils the request “will be highly honored throughout her life”.

If participants punish others who follow the social norm, this might further be motivated by a preference for gender equality. This is why we ask (again using 5 point Likert scales) to which degree the participant supports gender equality in education, wages, and positions in politics and the administration. For analysis, we compress responses to these three items into one, reporting the mean score per participant.

Arguably, when deciding participants face normative conflict, between the law and religion on the one hand, and social norms on the other hand. This conflict creates normative ambiguity. It is not clear for the participant which choice is expected. Psychological research demonstrates heterogeneity in the ability to navigate ambiguous situations. This motivates that we administer a 20 item validated survey that measures ambiguity tolerance (Mac Donald Jr 1970). We also use these items to isolate the norm and attitude questions from each other, by interspersing items from the ambiguity tolerance survey instrument.¹⁹ We again aggregate responses, using the mean over all 20 items per participant²⁰.

b) Results

Figure 10 summarizes results regarding the policy and attitude measures, reporting distributions by way of density plots. For comparability, measures are coded such that a high value stands for strongly supporting reform, and hence the position of daughters in inheritance matters. As Figure 10 shows, most participants have a clear opinion on these policy questions: they either support or reject the change, most of them even by “strongly” agreeing or disagreeing. We also see that opinions on all possible interventions are split, but not in the same way, Table 2.

Most participants strongly support a new legal rule that makes it impossible to circumvent the Sharia. Support is even more pronounced for a rule that obliges the father to compensate daughters if they are disinherited. Yet participants also strongly support a rule that would give the father the right to a will, with no compensation attached. Participants thus simultaneously support legal reform in favour and to the detriment of daughters. This decision pattern suggests that most participants particularly dislike the conflict between religious law and social practice.

¹⁹ For detail please see the Appendix.

²⁰ Following Mac Donald Jr (1970), 5 measures are reversely coded.

Very few participants think that a daughter asking for her share is selfish. But a majority agrees that she is very respectable, and will be honored, if she gives her share to her brother.

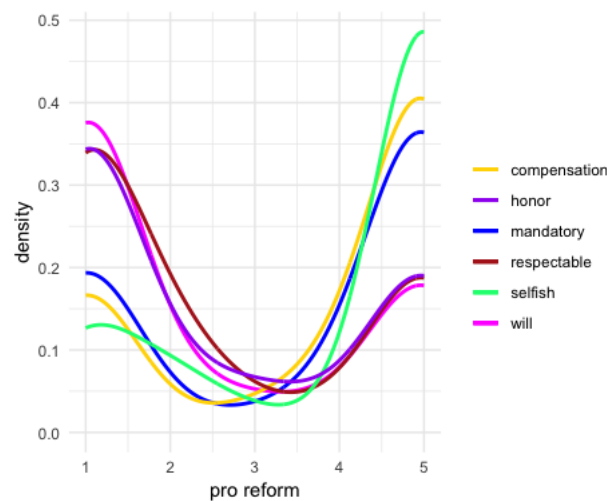


Figure 10
Distribution of Policy and Attitude Measures
 kernel density plots, pooled over genders
 all measures coded such that a high score stands for a decision pro reform

As the regressions in Table 3 show, for the most part the decision to punish another participant for following the social norm is indeed not motivated by the punisher's own decision. In most specifications, both decisions are not significantly correlated. This is different only for the punishment of females, and only when controlling for the amount of punishment the same participant has meted out to a female participant who has rejected the social norm. Arguably, this regressor captures the general inclination of this participant to punish females. With this control, we find a weakly significant, negative effect. If the participant has followed the social norm herself, she punishes female participants less for doing the same. To this degree hypothetical choices and punishment are consistent. Note, however, that there is no sign of consistency when it comes to punishing male participants. It is also interesting that we never find a significant effect of gender. The punishment patterns of male and female participants are indistinguishable.

The policy preference with the strongest explanatory power is a negative one. The more a participant disagrees with a change in the law that would give fathers power to write a will at their discretion, the more they punish female and male participants for following the social norm. This is consistent with a perceived conflict between personal and societal norm. While participants believe that their personal family has reason to follow the social norm, they do not want this choice to be imposed on everyone. The fact that support for gender equality is positively correlated with the decision to punish male participants (models 6 and 8) points into the same direction.

However further findings are not in line with this explanation. If it is at least weakly significant, support for the right of daughters to compensation has a negative coefficient. The more the participant is in favour of this change in the law, the more, not the less she punishes both males and females for following the social norm. Likewise the more the individual declares to support a proposed amendment to enforce the Sharia, the less she punishes others who have followed the social norm. On first reading, this is puzzling. The more the decision-maker wants the law to change and the position of daughters to be strengthened, the less she acts against those whose behaviour is at variance with this policy preference. Yet at closer sight, the behavioural pattern makes sense. It is consistent with sensitivity towards the normative conflict other participants face. The decision-maker wishes the legislator to remove this conflict. But as long as this has not happened, she does not want to blame others for the way how they have dissolved the conflict.

This explanation receives further support from the significant and sizeable negative effect of ambiguity tolerance. The more a participant is able and willing to live up to normative conflict, the more she is happy to give others the benefit of the doubt for the way how they have navigated the contentious terrain. Note, however, that this additional effect of ambiguity tolerance is confined to the decision to punish female participants. Apparently, decision-makers deem it more acceptable if a daughter gives in to social pressure, compared to a son exerting it.

As Figure 9 suggests, the decision to punish another participant for following the social norm is strongly and positively correlated with the decision to punish her for rejecting the social norm. With our data we cannot isolate the cause of this correlation. Participants might be spiteful. The low cost of punishment might have been tempting. They might have held the belief that they would likely be punished themselves, and wanted to strike back (although this is only possible indirectly, as they are not matched with the same person on the active and the passive side of punishment). Overall, with this additional control variable, results do not change deeply, which is comforting. We now also find a negative effect (both for the punishment of male and female participants) of support for the compensation scheme. This is additional evidence in favour of a difference in evaluation between individual acts and the desired contents of the law.

Beliefs about the decisions of others regarding the family estate, and their punishment choices, do not significantly explain the decision to punish another participant for following the social norm. Nor do the attitudinal measures (respectable, honour, and selfish). Adding them as further controls does, however, reduce significance levels (models 9). Apparently these additional controls pick up some of the variance previously explained by the policy preferences.

Table 3: Correlates of the Decision to Punish a Participant Who Follows the Social Norm

fempunyes	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8	model 9
own decision, (yes = 1)	8.105 (15.151)	4.842 (15.504)	4.595 (18.741)	3.641 (14.891)	-7.318 (15.16)	-7.341 (15.239)	-9.452 (15.032)	-22.508 ⁺ (12.189)	-24.408 ⁺ (12.844)
female	-2.575 (11.237)	-0.346 (11.004)	-0.247 (11.065)	-1.233 (11.033)	-3.511 (10.78)	-3.887 (10.942)	-5.116 (10.784)	-0.796 (8.666)	-2.256 (9.631)
(not) will		7.510* (3.123)	7.478* (3.141)	5.937 ⁺ (3.137)	6.266 ⁺ (3.232)	6.211 ⁺ (3.256)	6.085 ⁺ (3.205)	4.381 ⁺ (2.58)	5.691* (2.812)
mandatory			0.801 (3.022)	0.871 (3.007)	0.246 (2.938)	0.041 (3.068)	0.359 (3.023)	-2.619 (2.459)	-3.155 (2.629)
compensation				-4.708 (3.4)	-4.673 (3.309)	-4.755 (3.343)	-5.26 (3.299)	-6.898* (2.655)	-5.627 ⁺ (2.852)
amendment					-6.450* (2.613)	-6.533* (2.649)	-5.404* (2.667)	-1.574 (2.205)	-2.316 (2.282)
equal						1.814 (7.347)	0.321 (7.268)	0.072 (5.827)	2.43 (6.165)
ambiguity tolerance							-29.822* (14.979)	-26.265* (12.018)	-23.017 ⁺ (12.449)
punishment of female who rejects request								.559*** (0.079)	.499*** (0.082)
cons	62.064*** (14.703)	46.070** (15.813)	43.435* (18.741)	65.846** (24.691)	106.810*** (29.209)	100.211* (39.708)	171.646** (53.046)	135.970** (42.819)	96.871* (46.079)
controls	NO	NO	NO	NO	NO	NO	NO	NO	YES

Note: amendment, compensation, mandatory, will: for exact wording see Appendix; Likert scale 1:5, coded such that high score is for reform. Equal, ambiguity tolerance: mean score. Controls: respectable, honor, selfish, beliefs about choices of male and female participants, and about males and females, punishing males and females for following the social norm

data from participants who have participated in both waves of the experiment

standard errors in parenthesis

*** p < .001, ** p < .01, * p < .05, + p < .1

malepunyes	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8	model 9
own decision, (yes = 1)	21.172 (16.546)	17.836 (16.274)	15.740 (16.017)	14.864 (15.999)	2.248 (16.208)	2.084 (16.051)	1.391 (16.148)	-8.870 (13.378)	-10.827 (14.137)
Female	.712 (12.272)	2.991 (12.062)	3.830 (11.855)	2.925 (11.855)	.303 (11.525)	-2.372 (11.525)	-2.776 (11.584)	1.264 (9.552)	4.708 (10.601)
(not) will		7.678* (3.423)	7.410* (3.365)	5.996+ (3.564)	6.374+ (3.455)	5.984+ (3.430)	5.942+ (3.443)	2.617 (2.877)	3.616 (3.094)
mandatory			6.805* (3.237)	6.869* (3.231)	6.150+ (3.141)	4.686 (3.232)	4.791 (3.248)	1.361 (2.722)	1.975 (2.894)
compensation				-4.320 (3.653)	-4.280 (3.538)	-4.866 (3.521)	-5.032 (3.544)	-5.918* (2.919)	-5.622+ (3.139)
amendment					-7.425** (2.794)	-8.021** (2.790)	-7.651** (2.865)	-5.351* (2.383)	-4.632+ (2.512)
Equal						12.930+ (7.739)	12.441 (7.808)	15.810* (6.445)	11.096 (6.786)
ambiguity tolerance							-9.779 (16.091)	-3.918 (13.270)	-4.641 (13.703)
punishment of male who does not make request								.609*** (.092)	.459*** (.090)
Cons	51.876*** (16.056)	35.522* (17.334)	13.149 (20.080)	33.715 (26.529)	80.872* (31.228)	33.829 (41.823)	57.254 (56.984)	.925 (47.661)	-16.054 (50.719)
controls	NO	NO	NO	NO	NO	NO	NO	NO	YES

Note: amendment, compensation, mandatory, will: for exact wording see Appendix; Likert scale 1:5, coded such that high score is for reform. Equal, ambiguity tolerance: mean score. Controls: respectable, honor, selfish, beliefs about choices of male and female participants, and about males and females, punishing males and females for following the social norm data from participants who have participated in both waves of the experiment
standard errors in parenthesis

*** p < .001, ** p < .01, * p < .05, + p < .1

6. Conclusion

Most of the time, religious rules and social norms are in sync. The prevalent religion in a country shapes how its citizens expect each other to behave. But the co-evolution of religion and society is not automatic. A well-studied exception is secularisation. The impact of religion on society erodes. In this paper we document a very different instance of social norms being dissociated from religious rules, even from rules that are backed up by law. In this instance, the religious rule is more “modern”, by supporting females over males. Yet in social practice, it is largely blunted. As the paper shows, this social practice is backed up by widely held normative convictions.

This paper exploits a historical accident. In colonial times, what today is Pakistan had been under English rule, and had been part of the same administrative unit as India. The predominant religion in India is Hinduism. In the Hindu tradition, the wealth of the family is kept together. Upon the father's death, the entire estate goes to the eldest son. This is also what had been the practice in the regions of the British Empire that now are Pakistan. This is worth noting as the predominant religion in this region had always been the Islam. The Sharia has a non-waivable rule that differs from the Hindu tradition. The estate has to be split such that two thirds go to the sons, but one third goes to the daughters. Since independence, for the Muslim inhabitants of Pakistan the Sharia is the law of the land. Yet the solution from colonial times is commonly perpetuated regardless. Upon the death of their father, the eldest son asks his sisters to transfer their legal share to him by way of deed.

While this practice has frequently been reported anecdotally, in this project we generate controlled evidence. We can, of course, not have randomly people die, let alone randomly assign younger persons with defined characteristics to their father's passing away. This part of the experiment must remain hypothetical. But responses to the vignette show a strong willingness to follow the social norm, and to disregard the religious precept, and the law.

On an indirect path we increase credibility. After participants have responded to the vignette, we give them the (unannounced) possibility to punish a randomly assigned anonymous other participant for the choice they have indicated in the vignette. Most participants punish females who have rejected the request to transfer their share, as well as males who did not ask for the transfer. This suggests a prescriptive norm. We further incentivise beliefs about the answers in the vignette, and about the punishment choices of others. Participants predominantly expect others to follow the social norm, and to punish those who do not. This suggests a descriptive norm.

Thus far, we seem to see a clear picture: male dominance invalidates the religious rule. Yet at closer sight, the picture is more nuanced. Most participants do also punish those who follow the social norm. This is also what they expect others to do. We run an additional experiment to cast light on this unexpected result. It can partly be explained

by a conflict between personal and social norms. Participants are fine with following the social norm in their own family, but they do not want this to be common practice. Yet the decision to punish another participant for following the social norm is also significantly associated with support for policy reform to the advantage of females. However, the association is a negative one. The stronger the support for reform, the less, not the more participants punish others for following the social norm. This suggests that participants perceive the conflict between the religious rule and social practice, and do not want to hold it against others how they dissolve this conflict.

The main limitation of this paper is of course the hypothetical nature of the choice variable. But for decisions of this magnitude, interventions are out of the question. No responsible government would let researchers randomly dispose of the wealth of families. Yet combining self-report data with incentivised punishment and the incentivised elicitation of beliefs, we at least generate credible proxies. We also cannot claim that the sample is representative for the population of Pakistan. But arguably testing well-educated and urban participants puts the predominance of the social norm to an even harder test. If it all, one should expect these parts of the population to be more strongly opposed to gender discrimination.

In the vignettes, the brother and eldest son of the family issues the request. In a patriarchal society, upon the fathers death, he assumes family authority. If female respondents indicate that they will act as requested, they may do so out of respect for family authority. The typical authority structure in the family may have strengthened the effect of tradition. We cannot exclude this additional channel, but do not consider this a serious limitation. It is through a request by the oldest brother that the Sharia is circumvented in practice. Hence the vignette is externally valid. Moreover the distribution of authority in the family can itself be regarded an emanation of cultural tradition, and hence of the force opposing the religious rule.

Finally data about policy preferences has only been elicited after the main experiment. Consequently policy preferences cannot be interpreted as a treatment variable. However, the pronounced propensity to also punish others if they follow the social norm has been unexpected. With the second wave of the experiment, we wanted to learn more about potential forces driving this unexpected result.

If we only look at (hypothetical) choices, we have a straightforward result. Inheritance law remains "in the books". The social norm inherited from the colonial past trumps the Sharia, and thereby the law of the land. Yet punishment patterns and beliefs draw a more nuanced picture. Participants do not simply ignore the law. They experience the conflict between normative expectations originating in religion and in social practice. They dislike this conflict and predominantly desire that the legislator decides, with the majority preferring a more egalitarian solution. As long as this has not happened, they are torn between the expectations from the social environment, and the conflicting expectations from religion and the law.

References

- ABDALATI, HAMMUDAH (1993). Islam in Focus, American Trust Publications.
- ACEMOGLU, DARON, ALI CHEEMA, ASIM I KHWAJA AND JAMES A ROBINSON (2018). Trust in State and Non-State Actors: Evidence from Dispute Resolution in Pakistan
- ACEMOGLU, DARON AND MATTHEW O JACKSON (2017). "Social Norms and the Enforcement of Laws." Journal of the European Economic Association **15**(2): 245-295.
- AGARWAL, BINA (1994). "Gender and Command over Property. A Critical Gap in Economic Analysis and Policy in South Asia." World Development **22**(10): 1455-1478.
- AGARWAL, BINA (2002). "Bargaining" and Legal Change. Toward Gender Equality in India's Inheritance ILws
- AHMAD, EATZAZ, ANBEREEN BIBI AND TAHIR MAHMOOD (2012). "Attitudes Towards Women's Rights to Inheritance in District Lakki Marwat, Pakistan." Pakistan Development Review: 197-217.
- AHMAD, NAUSHEEN (2010). Land Rights for Pakistani (Muslim) Women: Law and Policy
- ALDASHEV, GANI, IMANE CHAARA, JEAN-PHILIPPE PLATTEAU AND ZAKI WAHHAJ (2012). "Using the Law to Change the Custom." Journal of Development Economics **97**(2): 182-200.
- ALI, SHAHEEN SARDAR (1997). A Critical Review of Family Laws in Pakistan. A Women's Perspective. Women Law in Legal Education and Practice in Pakistan. R. Mehdi and F. Shaheed. Copenhagen, Samfunds Litteratur: ***.
- ANDERSON, JAMES ND (1965). "Recent Reforms in the Islamic Law of Inheritance." International & Comparative Law Quarterly **14**(2): 349-365.
- ANDERSON, SIWAN (2000). The Economics of Dowry Payments in Pakistan
- ANDERSON, SIWAN AND CHRIS BIDNER (2015). "Property Rights over Marital Transfers." Quarterly Journal of Economics **130**(3): 1421-1484.
- ANOMALY, JONNY AND GEOFFREY BRENNAN (2014). "Social Norms, the Invisible Hand, and the Law." University of Queensland Law Journal **33**: 263-284.
- BASU, SRIMATI (2005). She Comes to Take her Rights. Indian Women, Property, and Propriety, Zubaan.

BENABOU, ROLAND AND JEAN TIROLE (2011). Laws and Norms

BHALOTRA, SONIA, RACHEL BRULÉ AND SANCHARI ROY (2018). "Women's Inheritance Rights Reform and the Preference for Sons in India." Journal of Development Economics: ***.

BURSZTYN, LEONARDO, ALESSANDRA L GONZÁLEZ AND DAVID YANAGIZAWA-DROTT (2018). Misperceived Social Norms. Female Labor Force Participation in Saudi Arabia, National Bureau of Economic Research

CARRANZA, ELIANA (2012). Islamic Inheritance Law, Son Preference and Fertility Behavior of Muslim Couples in Indonesia.
<https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5972>.

CARROLL, LUCY (1983). "The Hanafi Law of Intestate Succession: A Simplified Approach." Modern Asian Studies 17(4): 629-670.

CECCHI, FRANCESCO AND MEQUANINT BISET MELESSE (2016). "Formal Law and Customary Change. A Lab-in-field Experiment in Ethiopia." Journal of Economic Behavior & Organization 125: 67-85.

COOTER, ROBERT (1998). "Expressive Law and Economics." Journal of Legal Studies 27: 585-608.

COULSON, NOEL J (1963). Islamic Family Law. Progress in Pakistan. Changing Law in Developing Countries. N. J. Coulson and J. Anderson, London: George Allen and Unwin: 240-257.

DEININGER, KLAUS, APARAJITA GOYAL AND HARI NAGARAJAN (2013). "Womens' Inheritance Rights and Intergenerational Transmission of Resources in India." Journal of Human Resources 48(1): 114-141.

ELICKSON, ROBERT C (1998). "Law and Economics Discovers Social Norms." Journal of Legal Studies 27(S2): 537-552.

FLEMING, GRANT (1999). "Social Norms, Economic Behaviour, and the Law. A Theoretical Introduction." Australian Economic History Review 39(3): 163-171.

HOLDEN, LIVIA AND AZAM CHAUDHARY (2013). "Daughters' Inheritance, Legal Pluralism, and Governance in Pakistan." Journal of Legal Pluralism and Unofficial Law 45(1): 104-123.

JAWAD, HAIFAA A. (1998). Islam and Women's Inheritance. London, Palgrave Macmillan.

- KIMBER, RICHARD (1998). "The Qur'anic Law of Inheritance." Islamic Law and Society **5**(3): 291-325.
- KORSON, J HENRY (1971). "Endogamous Marriage in a Traditional Muslim Society. West Pakistan, a Study in Intergenerational Change." Journal of Comparative Family Studies **2**(2): 145-155.
- KUBE, SEBASTIAN AND CHRISTIAN TRAXLER (2011). "The Interaction of Legal and Social Norm Enforcement." Journal of Public Economic Theory **13**(5): 639-660.
- LA FERRARA, ELIANA AND ANNAMARIA MILAZZO (2017). "Customary Norms, Inheritance, and Human Capital. Evidence from a Reform of the Matrilineal System in Ghana." American Economic Journal: Applied Economics **9**(4): 166-185.
- LOEWENSTEIN, GEORGE, SAMUEL ISSACHAROFF, COLIN F. CAMERER AND LINDA BABCOCK (1993). "Self-Serving Assessments of Fairness and Pretrial Bargaining." Journal of Legal Studies **22**: 135-159.
- MAC DONALD JR, ALFRED P (1970). "Revised Scale for Ambiguity Tolerance. Reliability and Validity." Psychological Reports **26**(3): 791-798.
- MAKINO, MOMOE (2019). "Marriage, Dowry, and Women's Status in Rural Punjab, Pakistan." Journal of Population Economics **32**(3): 769-797.
- MEHDI, RUBYA (2001). Gender and Property Law in Pakistan. Resources and Discourses, Djoef Pub.
- NELSON, MATTHEW J (2011). In the Shadow of Shari 'ah. Islam, Islamic Law, and Democracy in Pakistan, Columbia University Press.
- PATEL, RASHIDA (1979). Women and Law in Pakistan, Faiza Publishers.
- PEARL, DAVID AND WERNER MENSKI (1998). Muslim Family Law, Sweet & Maxwell.
- POSNER, ERIC A (2002). "The Signaling Model of Social Norms. Further Thoughts." University of Richmond Law Review **36**: 465-480.
- POSNER, RICHARD A (1997). "Social Norms and the Law. An Economic Approach." American Economic Review **87**(2): 365-369.
- QUISUMBING, AGNES R AND KEIJIRO OTSUKA (2001). "Land Inheritance and Schooling in Matrilineal Societies. Evidence from Sumatra." World Development **29**(12): 2093-2110.

- RAO, NITYA (2007). "Custom and the Courts. Ensuring Women's Rights to Land, Jharkhand, India." Development and Change **38**(2): 299-319.
- RAO, NITYA (2017). 'Good Women do not Inherit Land': Politics of Land and Gender in India, Routledge.
- RAUF, ABDUR (1987). "Rural Women and the Family. A Study of a Punjabi Village in Pakistan." Journal of Comparative Family Studies **18**(3): 403-415.
- ROY, SANCHARI (2015). "Empowering Women? Inheritance Rights, Female Education and Dowry Payments in India." Journal of Development Economics **114**: 233-251.
- SANDEFUR, JUSTIN AND BILAL SIDDIQI (2013). Delivering Justice to the Poor. Theory and Experimental Evidence from Liberia. World Bank Workshop on African Political Economy.
- SELTEN, REINHARD (1967). Die Strategiemethode zur Erforschung des eingeschränkt rationalen Verhaltens im Rahmen eines Oligopolexperiments. Beiträge zur experimentellen Wirtschaftsforschung. E. Sauer mann. Tübingen, Mohr: 136-168.
- SERAJUDDIN, ALAMGIR MUHAMMAD Muslim Family Law, Secular Courts and Muslim Women of South Asia. Karachi, Oxford University Press
- SHINWARI, NAVEED AHMAD (2015). Understanding the Informal Justice System. Opportunities and Possibilities for Legal Pluralism in Pakistan
- SIDDIQUE, OSAMA (2013). Pakistan's Experience with Formal Law. An Alien justice, Cambridge University Press.
- WEISS, ANITA M (2014). Legal Reforms and State Policies Affecting Women's Rights. Interpreting Islam, Modernity, and Women's Rights in Pakistan. A. M. Weiss, Springer: 21-54.
- ZASU, YOSHINOBU (2007). "Sanctions by Social Norms and the Law: Substitutes or Complements?" Journal of Legal Studies **36**(2): 379-396.

Appendix

Appendix 1 Demographics

Table 4: Demographic Characteristics of the Complete Sample

	male	female
age	21.36 years	20.42 years
unmarried	90.29%	91.09%
Sindh	68.93%	82.18%
urban	47.57%	34.65%
bachelor degree or higher	69.90%	65.35%
Muslim	97.09%	99.01%
Sunni	88.35%	84.16%
number of participants	103	101

Appendix 2 Correlations between Choices, Beliefs and Controls in Wave 1

The design of the experiment does not make it possible to isolate causal relationships between the variables elicited from participants. Neither beliefs nor punishment choices have been randomly assigned to participants. We also cannot rule out that hypothetical decisions have influenced beliefs and punishment choices, not the other way around. We can only look at correlations among these variables. But these correlations are informative.

As Table 5 and Table 6 show, correlations differ quite profoundly between female and male participants. Female participants take hypothetical decisions that are consistent with their descriptive beliefs. Significance levels depend on control variables. But in all specifications of Table 5, there is either an effect of descriptive beliefs about the choices made by male participants or by female participants, and in most specifications by both of them.

In models 5-7, we also find a significant positive correlation of hypothetical choices with the belief that other female participants punish males who do not ask for the legal rule to be circumvented. This is consistent with an additional effect of prescriptive beliefs. Yet we also find a significant negative correlation with the belief about females punishing other females who do not accept the request. It is not easy to rationalise this divergence between the relevance of these two beliefs. Perhaps females consider the implementation of the norm to be the males' responsibility. Moreover, hypothetical decisions are not significantly correlated with punishment choices. This also speaks against an effect of prescriptive beliefs.

Finally we find that the hypothetical decision to accept the request is positively correlated with the stated personal importance of religion. This is remarkable as the legal rule is actually directly taken from the Sharia, and we have also participants told so in the experiment. Apparently religious belief translates into support for traditional values, even if the concrete value is at variance with religious law. Adding the full set of control variables (Model 7) does change all these effects only very little.

As Table 6 shows, the picture looks very different for male participants. For them, hypothetical choices and descriptive beliefs are uncorrelated. By contrast, there is a significant positive correlation with their own decision to punish females if they reject the request, and with their belief about males being punished by other males if they do not ask for the transfer.

Taken together, the correlation structure suggests that females, at least chiefly, accept the request as they believe this is what one does. By contrast, it seems that males ask for the transfer because they hold the prescriptive belief that this is what ought to happen, and what other males are willing to enforce.

Table 5: Correlates of Hypothetical Decisions of Females

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
belief about male choices	0.014* (0.006)	0.011+ (0.006)	0.011+ (0.006)	0.011+ (0.006)	0.014* (0.006)	0.014* (0.006)	0.011+ (0.006)	0.0004 (0.006)
belief about female choices		0.011* (0.005)	0.011* (0.005)	0.012* (0.005)	0.011* (0.005)	0.011+ (0.005)	0.010+ (0.005)	0.012* (0.006)
belief about males punishing females who reject			-0.0003 (0.001)	0.001 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.002)
belief about females punishing females who reject				-0.002 (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)
belief about males punishing males who do not ask					-0.002+ (0.001)	-0.002+ (0.001)	-0.002+ (0.001)	-0.002 (0.001)
belief about females punishing males who do not ask					0.003* (0.001)	0.003* (0.001)	0.003* (0.001)	0.001 (0.001)
punishment of females who reject						0.0002 (0.001)	0.0004 (0.001)	0.001 (0.001)
punishment of males who do not ask						-0.0004 (0.001)	-0.0003 (0.001)	0.0002 (0.001)
importance of religion							0.028* (0.012)	0.028+ (0.015)
Constant	0.675*** (0.091)	0.573*** (0.103)	0.585*** (0.109)	0.599*** (0.109)	0.542*** (0.112)	0.549*** (0.115)	0.448*** (0.112)	1.328*** (0.404)
Controls	NO	NO	NO	NO	NO	NO	NO	YES
N	101	101	101	101	101	101	101	100

Note: Linear Probability Models; dv: hypothetical decision to accept request to transfer legal share in estate; controls: support for amendment, family value score, mother claimed share, aunt claimed share, bachelor degree or higher, urban, sister(s) went to school, mother has/had a job, family holds house in city, age, unmarried, number of brothers, number of sisters, parents are related, family holds agricultural land, family holds commercial plot, family holds residential plot, Sindh, Sunni, major (5 categories), father works in governmental agency; model 7: 1 missing value on age. Standard errors in parenthesis. *** p < .001, ** p < .01, * p < .05, + p < .1

Table 6: Correlates of Hypothetical Decisions of Males

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
belief about male choices	0.012 (0.008)	0.012 (0.008)	0.007 (0.008)	0.008 (0.008)	0.008 (0.008)	0.005 (0.008)	0.006 (0.008)	0.006 (0.009)
belief about female choices		-0.002 (0.007)	0.00004 (0.007)	0.00001 (0.007)	-0.001 (0.007)	-0.004 (0.007)	-0.004 (0.007)	0.0002 (0.008)
belief about males punishing females who reject			0.003* (0.001)	0.002+ (0.001)	0.002 (0.002)	0.002 (0.002)	0.003+ (0.002)	0.004* (0.002)
belief about females punishing females who reject				-0.0003 (0.001)	0.001 (0.001)	0.001 (0.001)	0.0005 (0.001)	-0.002 (0.002)
belief about males punishing males who do not ask					0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002 (0.001)
belief about females punishing males who do not ask					-0.001 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.001 (0.001)
punishment of females who reject						0.003* (0.001)	0.003* (0.001)	0.003* (0.001)
punishment of males who do not ask						-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
importance of religion							0.021 (0.014)	0.035+ (0.019)
Constant	0.647*** (0.109)	0.666*** (0.123)	0.551*** (0.129)	0.541*** (0.129)	0.520*** (0.142)	0.509*** (0.138)	0.382* (0.163)	0.548 (0.380)
controls	NO	NO	NO	NO	NO	NO	NO	YES
N	103	103	103	103	103	103	103	100

Note: Linear Probability Models; dv: hypothetical decision to request transfer of legal share in estate; controls: support for amendment, family value score, mother claimed share, aunt claimed share, bachelor degree or higher, urban, sister(s) went to school, mother has/had a job, family holds house in city, age, unmarried, number of brothers, number of sisters, parents are related, family holds agricultural land, family holds commercial plot, family holds residential plot, Sindh, Sunni, major (5 categories), father works in governmental agency; model 7: 3 missing values on age. Standard errors in parenthesis. *** p < .001, ** p < .01, * p < .05, + p < .1

Appendix 3 Comparison between Wave 1 and Wave 2

Table 7: Comparison of First and Second Wave

	female		male	
	wave 1 only	both waves	wave 1 only	both waves
number of participants	101	45	103	53
mean age	20.42	19.91	21.36	21.74
(sd age)	(2.77)	(2.39)	(4.52)	(3.38)
Unmarried	92	42	93	47
Sindh	83	36	71	40
not urban	66	33	54	27
Degree	66	30	72	36
Muslim	100	45	100	52
Sunni	85	38	91	48
accept / ask	88	38	83	44
mean belief about number of 20 female accepting	13.38	12.38	11.71	10.49*
	(6.32)	(6.67)	(5.99)	(6.05)
mean belief about number of 20 male asking	14.39	14.13	13.56	12.66 ⁺
	(5.62)	(5.62)	(5.19)	(5.13)
mean punishment of female rejecting, range [0,200]	68.44	70.38	71.15	76.62
	(51.41)	(60.17)	(54.22)	(58.39)
mean punishment of male not asking, range [0,200]	70.77	73.78	73.96	81.51
	(48.67)	(52.97)	(51.40)	(55.91)
mean punishment of female accepting, range [0,200]	62.53	66.33	64.15	68.79
	(59.37)	(62.14)	(51.42)	(48.59)
mean punishment of male asking, range [0,200]	63.66	70.47	65.14	69.45
	(62.14)	(69.99)	(53.68)	(51.61)

belief about punishment of females who reject by females, range [0,200]	53.17 (39.80)	57.00 (44.03)	51.84 (34.27)	47.23 (31.72)
belief about punishment of females who reject by males, range [0,200]	55.19 (36.66)	50.09 (38.19)	58.99 (37.36)	56.30 (30.59)
belief about punishment of males who do not ask by females, range [0,200]	49.97 (33.58)	47.09 (37.42)	51.31 (35.15)	51.68 (32.62)
belief about punishment of males who do not ask by males, range [0,200]	53.84 (38.17)	49.36 (45.02)	67.97 (40.16)	68.89 (41.53)
belief about punishment of females who accept by females, range [0,200]	44.05 (36.82)	48.20 (41.28)	47.85 (39.82)	43.75 (37.54)
belief about punishment of females who accept by males, range [0,200]	41.88 (30.26)	35.24* (28.08)	55.28 (40.44)	50.77 (39.61)
belief about punishment of males who ask by females, range [0,200]	39.82 (34.31)	35.60 (38.83)	47.25 (38.97)	42.91 (36.93)
belief about punishment of males who ask by males, range [0,200]	42.20 (35.08)	36.33 (37.56)	53.98 (46.26)	51.11 (48.52)
support for amendment, range [1,7]	4.73 (2.17)	4.36 (2.30)	4.63 (2.16)	4.74 (2.04)

Note: Significance tests from regressing respective variable on a dummy that is 1 if data is present in both waves. Standard deviations in parenthesis. * $p < .05$, + $p < .1$

Appendix 4
Instructions
Study 1

oTree Program

General Instructions

Welcome! You are now participating in an experiment. In some parts of the experiment, you can earn money. It is therefore particularly important that you take your time for understanding the instructions.

All your decisions will remain absolutely anonymous.

The experiment consists of four independent parts and a survey. Your decisions in one part of the experiment will not influence your earnings and choices in other parts of the experiment. Before the beginning of further parts of the experiment, you will receive instructions for the respective part.

In some parts of the experiment, your earnings do not only depend on your own choices, but also on the choices of other participants in the same experiment. As we want to fully preserve anonymity, participants with whom you interact participate in another session. The computer will randomly match participants once all sessions have been terminated. This is why we will not immediately inform you about the results of the experiment and your earnings. You will receive this information and your payoff from the experiment once all sessions from this experiment have been concluded.

For participating in the experiment, you earn upfront

350 PKR

Part 1

In this part of the experiment, you cannot earn money. We are interested in your hypothetical decision.

Assume you have grown up in a Muslim family with one sibling of opposite sex. Your father has not made a will.

According to Islamic law of inheritance you are entitled to 1/3 of your father's property. Your brother is entitled to 2/3 of the property. Your brother points to the fact that many families prefer to keep the property with the sons. To that end he asks you to sign a document in which you declare to transfer your share of property to him. Would you sign the document?

Part 2: Introduction

In this part of the experiment, you can earn additional money. We are interested in your beliefs about the choices that 20 other, randomly selected, male and female participants have made in Part 1 of the experiment.

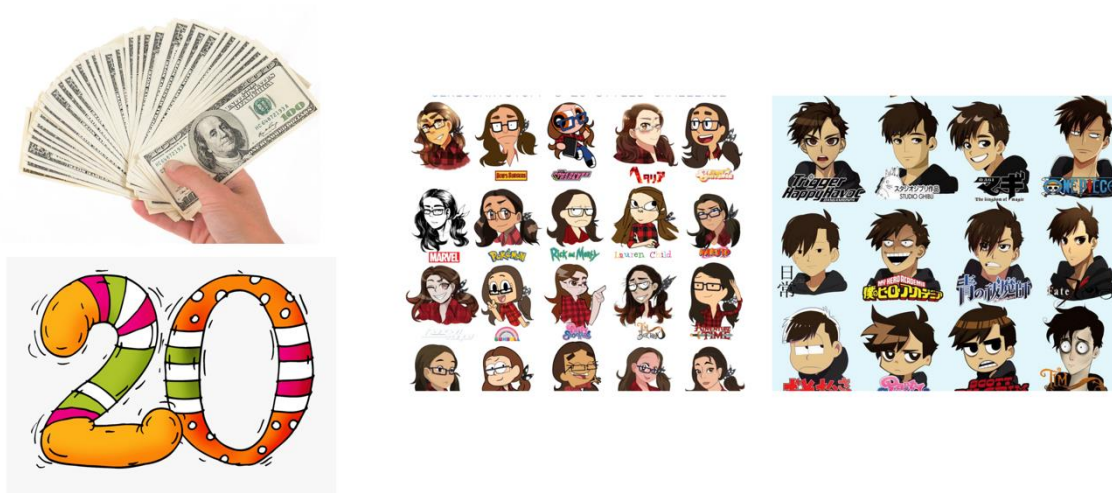
To that end we will show you the following table:

Participants have been asked	Your estimate: how many of 20 participants do you think have answered "Yes"?
male participants : "Would you prepare a document in which your sister declares to transfer her share of property to you, and ask her to sign it?"	your estimate
female participants : "Your brother asks you to sign a document in which you declare to transfer your share of property to him, Would you sign the document?"	your estimate

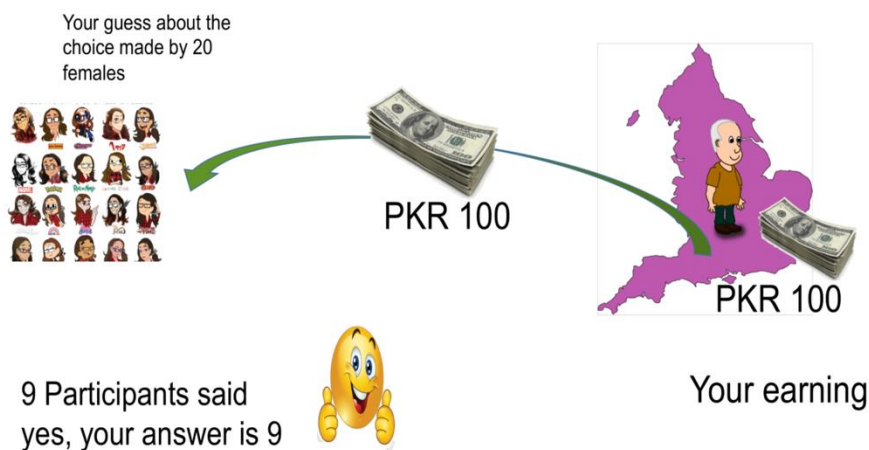
If your estimate for either question is exactly correct, for this question you additionally earn 100 PKR. If your answer is below or above by 1, you additionally earn 60 PKR. If your answer is below or above by 2, you additionally earn 30 PKR. If your answer is below or above by 3, you additionally earn 10 PKR. If your answer is even further away from the actual number, you do not earn additional money.

Graphical Representation

You can make money by correctly guessing how many out of 20 said yes/no



Example



Control Questions

We want to be sure that you have truly understood the design. Please show this by answering the following control questions:

Please recall: If your estimate for either question is exactly correct, for this question you additionally earn 100 PKR. If your answer is too low or too high by 1, you additionally earn 60 PKR. If your answer is too low or too high by 2, you additionally

earn 30 PKR. If your answer is too low or too high by 3, you additionally earn 10 PKR. If your answer is even further away from the actual number, you do not earn additional money.

The true number of participants who have made the respective choice is 12. Your estimate is 12. Which is your payoff from this question?

The true number of participants who have made the respective choice is 7. Your estimate is 9. Which is your payoff from this question?

Part 2: Actual Questions

In this part of the experiment, you can earn additional money. We are interested in your beliefs about the choices that 20 other, randomly selected, male and female participants have made in Part 1 of the experiment.

Participants have been asked	Your estimate: how many of 20 participants do you think have answered "Yes"
male participants : "Would you prepare a document in which your sister declares to transfer her share of property to you, and ask her to sign it?"	Your estimate
female participants : "Your brother asks you to sign a document in which you declare to transfer your share of property to him, Would you sign the document?"	Your estimate

Part 3

In this part of the experiment, your total earning is based on two different endowments:

Endowment A is of 300 PKR

Endowment B is of 100 PKR

Endowment A + Endowment B = Your Total Earning

$300 + 100 = 400$

Endowment A (300 PKR) is for you to keep, unless a randomly matched participant X decides to reduce this endowment by using their endowment B against a cost for herself. From endowment B (100 PKR), you can reduce the endowment A of a randomly matched participant Y, at a cost to yourself.

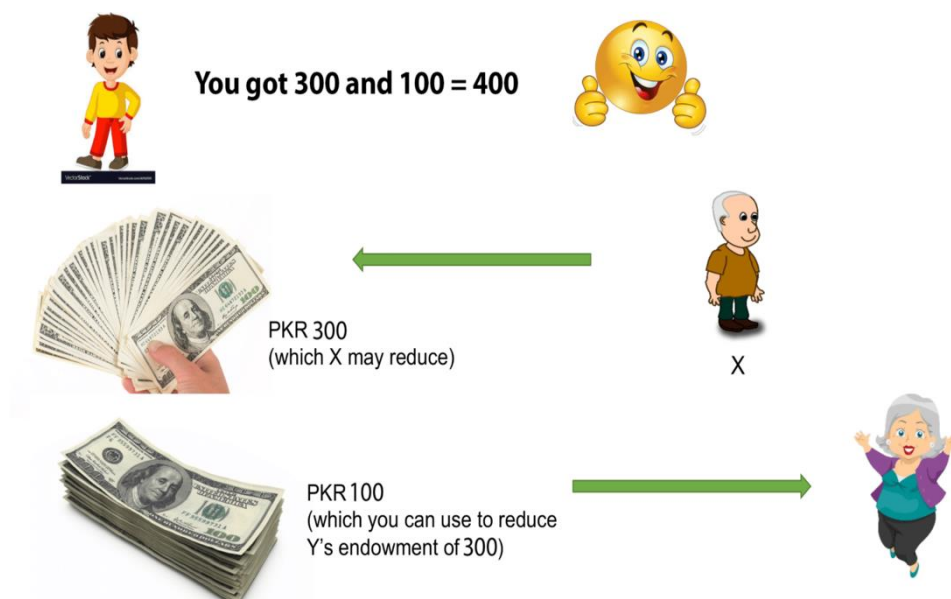
Please note that the participant Y whose endowment A you can reduce is different from the participant X who can reduce your endowment A.

Any amount from your endowment B that you use reduces endowment A of the participant Y with (whom you are matched) by **a factor of 3**.

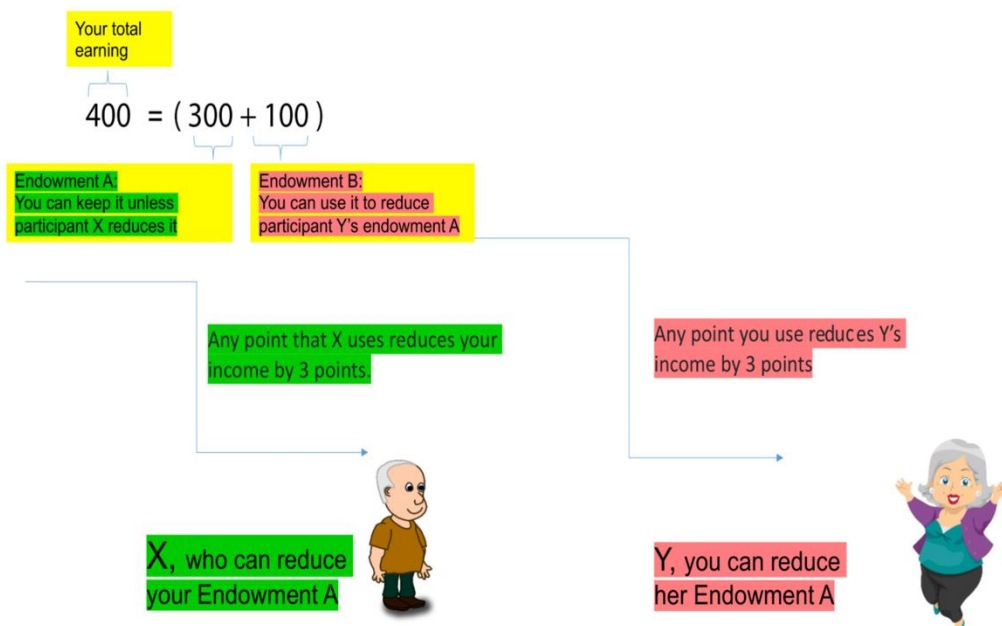
On the next page, we would provide you with two Scenarios based on the hypothetical decision of participant Y after which we would ask you to **decide** whether you want to reduce the earnings of your counterpart, at the specified cost for yourself.

Once all experiment sessions have concluded, we will execute the applicable choice and calculate your earnings and the earnings of participant Y accordingly. **Only one of your four choices in this part of the experiment will be implemented, depending on who is participant Y, and what he/she has decided.**

Graphical Representation

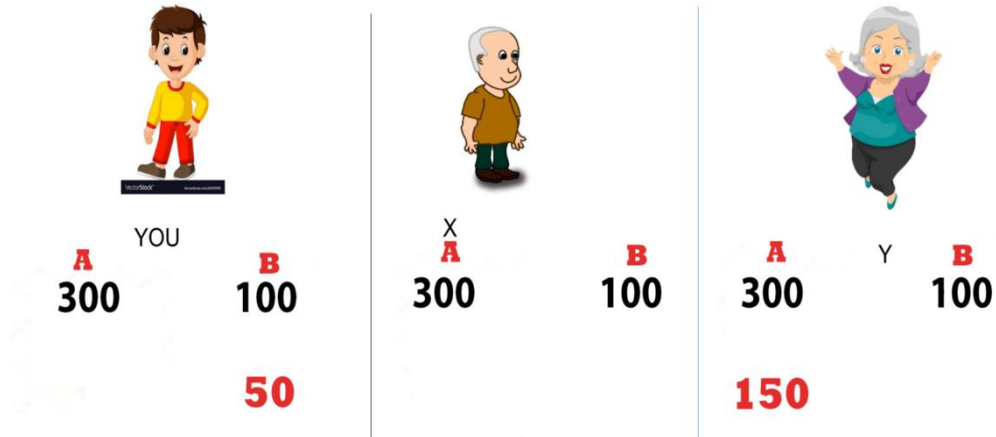


How much you earn depends on what you do to Y and what X does to you!



Example

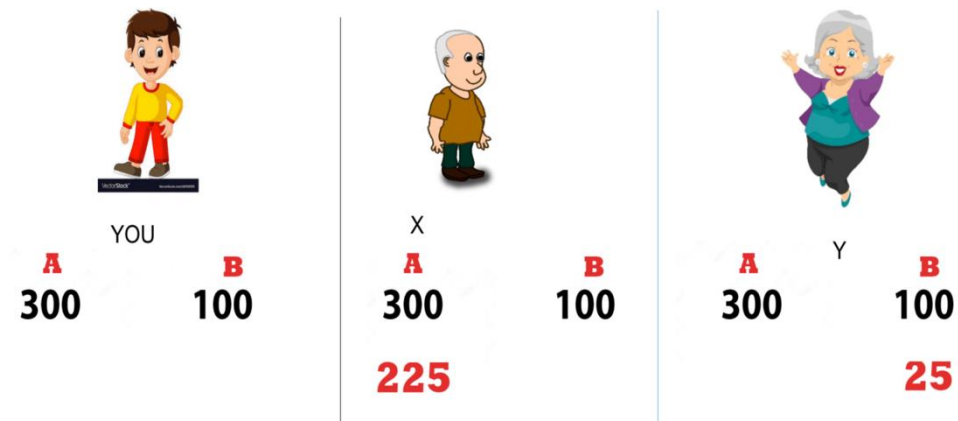
You spend half of your endowment B



Part 3 Control Questions

Example

Y spends a quarter of her endowment B



We want to be sure that you have understood the implications of the choices you are able to make in this part of the experiment. This is why we first ask you to solve two control questions.

Please remember: Endowment A is 300, Endowment B is 100. Any amount of endowment B that a player uses reduces the endowment A of his/her counterpart by 3 times of this amount.

You have decided to keep your entire endowment B. Which is the endowment A of participant Y?

You have decided to use 50 PKR from your endowment B. Which is the endowment A of participant Y?

Part 3: Decision

We now ask for your decision about endowment B (PKR 100). If you do not want to use any of it, please put in 0 in the respective cell of the table below. Please remember: **any amount you use reduces the endowment A (PKR 300) of your random counterpart by 3 times this amount .**

Suppose that participant **Y is a male**:

Question:		Participant's Hypothetical Decision	How much from your Endowment B (PKR 100) would you be willing to spend to reduce Endowment A (PKR 300) of this participant.
Scenario 1	"Would you prepare a document in which your sister declares to transfer her share of property to you and ask her to sign it?"	Yes	Your choice
Scenario 2	"Would you prepare a document in which your sister declares to transfer her share of property to you and ask her to sign it?"	No	Your choice

Suppose that participant **Y is a female**:

	Question:	Participant's Hypothetical Decision	How much from your Endowment B (PKR 100) would you be willing to spend to reduce Endowment A (PKR 300) of this participant.
Scenario 1	"Your brother asks you to sign a document in which you declare to transfer your share of property to him, would you sign the document?"	Yes	Your choice
Scenario 2	"Your brother asks you to sign a document in which you declare to transfer your share of property to him, would you sign the document?"	No	Your choice

Part 4

In part 4 of the experiment, we are interested in your beliefs about the choices other participants have made in Part 3 of the experiment.

In part 3, participants had the option to reduce the earnings of their random counterpart by incurring a cost between 0 and 100 PKR.

Now we are asking you to indicate the estimated **average amount** in your opinion (rounded to the next integer) that was spent by participants to reduce the earning's of their counterpart.

Please note that we ask for the estimated **amount spent**, not for the effect this has had on the earnings of a participant's counterpart (which is three times this number, by the design of the experiment).

If your estimate to any of the following question is no more than 2 above or below the actual average, for this question you additionally earn 25 PKR. If your answer is too low or too high by no more than 5, you additionally earn 15 PKR. If your answer is too low or too high by no more than 10, you additionally earn 5 PKR.

We want to be sure that you have understood the implications of the choices you are able to make in this part of the experiment. This is why we first ask you to solve two control questions.

Suppose that the actual average amount spent by participants (rounded to the next integer) is 49. Your estimate is 50. Which is your earning from this question?

Suppose that the actual average amount spent by participants (rounded to the next integer) is 86. Your estimate is 90. Which is your earning from this question?

Part 4: Beliefs about Reactions to Choices by Male Participants

Suppose that participant Y is **male** and he has been asked:

"Would you prepare a document in which your sister declares to transfer her share of property to you, and ask her to sign it?"

Response of Participant Y	Gender of Decision Makers who had the option to reduce earning of participant Y?	YOUR estimate of the AVERAGE amount spent by decision makers (from their Endowment B which is 100PKR) to reduce earning of participant Y
Yes	Male	Your estimate
Yes	Female	Your estimate
No	Male	Your estimate
No	Female	Your estimate

Part 4 Beliefs about Reactions to Choices by Female Participants

Suppose that participant Y is **female** and she has been asked:

"Your brother asks you to sign a document in which you declare to transfer your share of property to him. Would you sign the document?"

Response of Participant Y	Gender of Decision Makers who had the option to reduce earning of participant Y?	YOUR estimate of the AVERAGE amount spent by decision makers (from their Endowment B which is 100PKR) to reduce earning of participant Y
Yes	Male	Your estimate
Yes	Female	Your estimate
No	Male	Your estimate
No	Female	Your estimate

Questionnaire 1

Please be so kind as to answer the following questions carefully and truthfully. Thank you in advance!

What is your age (in years)?

What is your marital status?

- unmarried
- married
- divorced
- prefer not to tell

What part of the country are you from?

- Federal
- Punjab
- Sindh
- Khyber - Pakhtunkhwa
- Baluchistan
- Azad Jammu Kashmir
- Gilgit Baltistan
- prefer not to tell

What best describes your native region?

- rural
- urban
- prefer not to tell

In which discipline have you received your latest degree?

- Natural Sciences
- Engineering
- Medicine
- Social Sciences
- Law
- Humanities
- none of the above
- prefer not to tell

In which degree program you are currently studying?

- Bachelor
- Master
- MPhil
- PhD
- none of the above
- prefer not to tell

What sector does your father/head of the family work in?

- Government Agency
- Private Sector
- NGO or Think Tank
- Self - employed
- Family business
- Agriculture
- none of the above
- retired
- prefer not to tell

Regarding family values, what does best describe your attitude?

- very liberal
- liberal
- moderate
- conservative
- very conservative

Questionnaire 2

What is your religion?

- Muslim
- Christian
- Hindu
- none of the above
- prefer not to tell

If you are a Muslim, what is your sect?

- Shia Muslim
- Sunni Muslim
- not applicable

How important is religion in your life?

- very unimportant
- unimportant

- somewhat unimportant
- neither important nor unimportant
- somewhat important
- important
- very important

How have your parents been related before getting married?

- cousin
- second cousin
- not related
- prefer not to tell

What is the occupational status of your mother?

- is currently working
- has been working in the past
- has never been working
- prefer not to tell

How many brothers do you have?

How many sisters do you have?

Have all your sister siblings attended at least secondary school?

- yes
- no
- not applicable
- prefer not to tell

Questionnaire 3

Does your family own agricultural land?

- no
- yes
- prefer not to tell

Does your family own a house in a city?

- no
- yes
- prefer not to tell

Does your family own a house in a village?

- no
- yes
- prefer not to tell

Does your family own a commercial plot?

- no
- yes
- prefer not to tell

Does your family own a residential plot?

- no
- yes
- prefer not to tell

Questionnaire 4

Has your mother claimed her share in her father's property?

- no
- yes
- not applicable
- prefer not to tell

Have your father's sisters claimed their shares in your grandfather's property?

- no
- yes
- not applicable
- prefer not to tell

Recently an amendment to the law has been proposed that would make it mandatory for women (sisters, daughters, mothers, wives) to receive their fair shares in inheritance. Do you support the proposal?

- strongly disagree
- disagree
- somewhat disagree
- neither agree nor disagree
- somewhat agree
- agree
- strongly agree

Good Bye

Thank you for participating.

Let us remind you that you will be matched with participants from other sessions. This is why we cannot immediately give you feedback, and cannot directly give you your earnings.

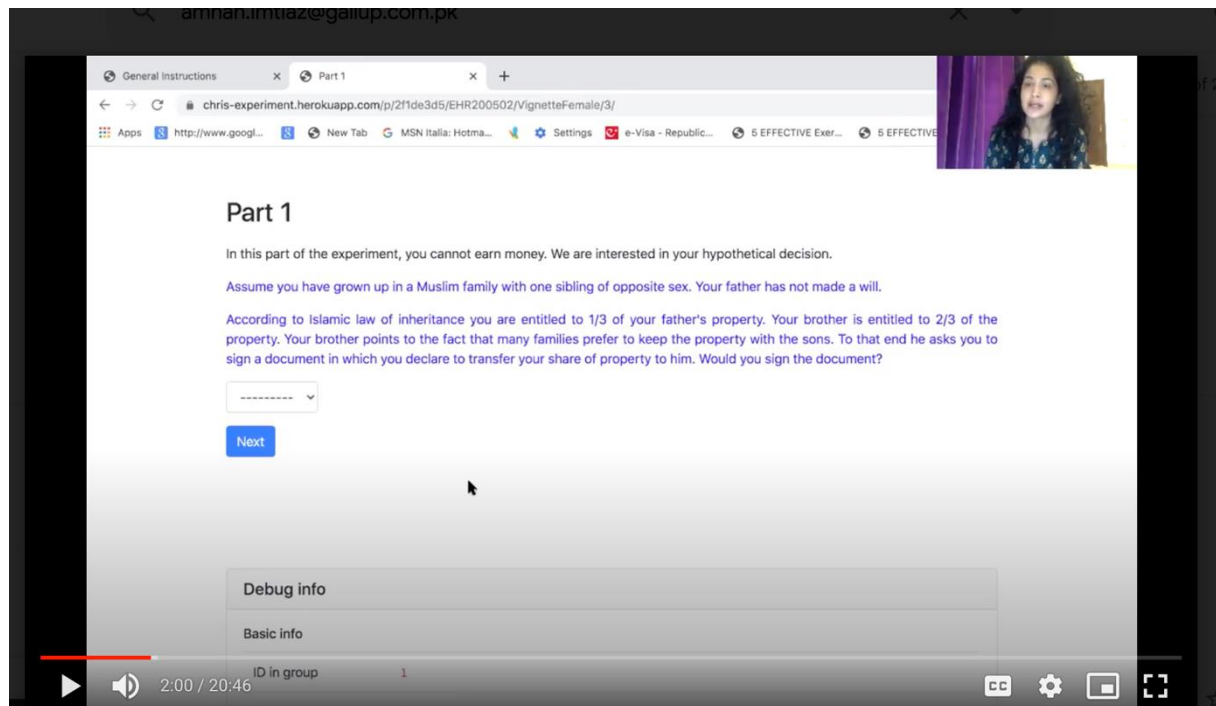
This will happen the following way: Once all sessions for the experiment have concluded, a Gallup Pakistan representative/recruiter would approach you with the results and your earnings. Please note that the processing may take up to 10 days.

Your earnings will most likely be handed over to you in cash or sent to you through some digital payment medium like EasyPaisa etc.

Please ensure that you have provided your accurate contact details (Name, Phone number and Email Address) to the supervisor before leaving.

If you have comments for us, please type them into the field below:

Screenshot of Zoom Session



**photographs from sessions
(at Gallup's premises in Lahore)**





Example Feedback Form

Part 2 of the Experiment

In Part 2 of the Experiment, you have estimated that 5 of the 20 randomly selected **female** participants have answered “will do that”. The actual number is 18. Therefore you earn 0 PKR.

In Part 2 of the Experiment, you have estimated that 15 of the 20 randomly selected **male** participants have answered “will do that”. The actual number is 17. Therefore you earn 30 PKR.

Part 3 of the Experiment

In Part 3 of the Experiment, you have been randomly matched with a participant of female gender. In Part 1 of the experiment, this participant has decided “will do that”. For this case, you have decided to use 100 of your endowment B of 100 PKR. A second randomly matched participant has reacted to your choice in Part 1, such that your endowment A of 300 PKR is reduced to -300 PKR.

Part 4 of the Experiment

In Part 4 of the Experiment, the 20 randomly selected female participants have on average invested 73 if a female participant has decided in Part 1 “will do that”. You have estimated that mean to be 200. Therefore you have earned 0 PKR.

The 20 randomly selected female participants have on average invested 66 if a female participant has decided in Part 1 “will not do that”. You have estimated that mean to be 200. Therefore you have earned 0 PKR.

The 20 randomly selected female participants have on average invested 83 if a male participant has decided in Part 1 “will do that”. You have estimated that mean to be 20. Therefore you have earned 0 PKR.

The 20 randomly selected female participants have on average invested 77 if a male participant has decided in Part 1 “will not do that”. You have estimated that mean to be 100. Therefore you have earned 0 PKR.

The 20 randomly selected male participants have on average invested 79 if a female participant has decided in Part 1 “will do that”. You have estimated that mean to be 20. Therefore you have earned 0 PKR.

The 20 randomly selected male participants have on average invested 80 if a female participant has decided in Part 1 “will not do that”. You have estimated that mean to be 100. Therefore you have earned 0 PKR.

The 20 randomly selected male participants have on average invested 82 if a male participant has decided in Part 1 “will do that”. You have estimated that mean to be 50. Therefore you have earned 0 PKR.

The 20 randomly selected female participants have on average invested 71 if a female participant has decided in Part 1 “will not do that”. You have estimated that mean to be 200. Therefore you have earned 0 PKR.

1

Total Profit

The total profit consists of the payoffs listed above, plus the showup fee of 350. In total you have earned **350 PKR**.

Study 2 Instructions

Thank you very much for participating in the second part of the inheritance project. This is a follow up study of the first part of inheritance experiment in which you participated through physically coming to Gallup office, in the month of November/December 2020.

We want to know more about your opinion on the inheritance law and the culture about inheritance distribution to the women in the country. It is a simple survey. There is no right or wrong answer. We are interested in your assessment.

A problem has little attraction for me if I don't think it has a solution.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

I am just a little uncomfortable with people unless I feel that I can understand their behavior.

1. strongly agree
2. somewhat agree
3. Cannot decide

4. Do not agree to an extent
5. Do not agree at all

There is a right way and a wrong way to do almost everything.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

I would rather bet 1 to 6 on a long shot than 3 to 1 on a probable winner.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

The way to understand complex problems is to be concerned with their larger aspects instead of breaking them into smaller pieces.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

In the first part of the experiment, we have asked you how you would decide in case your father dies unexpectedly. We would like to come back to this issue, and ask about your opinion.

Under the law in force, the only way to keep the estate in one hand is a deed. The daughter(s) acquire the enforceable right to 1/3 of the estate. But they can transfer their share to their brother(s) after their father has passed away, by way of a gift. Would you be in favor of a rule that makes this impossible? Under this rule, the transfer would be automatic, and sisters would be prevented from transferring back their share, or individual pieces of property, to their brother(s).

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

I get pretty anxious when I'm in a social situation over which I have no control.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Practically every problem has a solution.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

It bothers me when I am unable to follow another person's train of thought.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

I have always felt that there is a clear difference between right and wrong.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

It bothers me when I don't know how other people react to me.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Let us come back to the first part of the experiment. We would again want to learn about your opinion. Under the law in force, the only way to keep the estate in one hand is a deed. The daughter(s) acquire the enforceable right to 1/3 of the estate. But they can transfer their share to their brother(s) after their father has passed away. At this point, the brothers depend on the decision of their sisters. Would you be in favor of a rule that gives the father the right to write a will? The father would be free to decide which of his children receive which part of the estate upon his death, and could assign the entire estate to one of his sons.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Nothing gets accomplished in this world unless you stick to some basic rules.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

If I were a doctor, I would prefer the uncertainties of a psychiatrist to the clear and definite work of someone like a surgeon or X-ray specialist.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Vague and impressionistic pictures really have little appeal for me.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

If I were a scientist, it would bother me that my work would never be completed (because science will always make new discoveries).

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Before an examination, I feel much less anxious if I know how many questions there will be.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Let us once more come back to the first part of the experiment. We would again want to learn about your opinion. At present, when the father dies, the family faces a conflict. The law is mandatory. The father cannot write a will that disposes of the estate in ways that diverge from $\frac{2}{3}$ going to the son(s), and $\frac{1}{3}$ to the daughter(s). The only legal way of keeping the wealth of the family in one hand is a voluntary transfer, from the daughter(s) to the son(s), which can only be implemented after the death of the father. The daughter(s) then give up a right they had previously acquired. Would you be in favor of a rule that gives the family more flexibility, while protecting the position of daughters? The rule might allow the following: the father may dispose of the estate while still alive, and is allowed to transfer the entire estate to one of his sons (or to one of his daughters, for that matter). Yet such a will is only valid if it provides for the proper compensation of children who do not receive the estate. Such compensation could already have been received during the father's lifetime (for instance by support for a child's education, entrepreneurial activities, or acquisition of a house), or it could come in the form of the obligation of the recipient of the estate to pay an adequate amount of money, for instance over a longer number of years.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent

5. Do not agree at all

The best part of working a jigsaw puzzle is putting in that last piece.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Sometimes I rather enjoy going against the rules and doing things I'm not supposed to do.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

I like to fool around with new ideas, even if they turn out later to be a total waste of time.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Perfect balance is the essence of all good composition.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Girls and boys should receive the same level of education.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Women and men should earn the same wage for the same job.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent

5. Do not agree at all

Women and men should have access to the same positions in politics and administration.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Let us one final time come back to the first part of the experiment. We would again want to learn about your opinion. A respectable woman with integrity should fulfill the request of her brother to transfer her share of the estate upon the death of their father.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

A woman who claims her share of the inheritance is very selfish.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

A woman who transfers her share of the estate to her brother will be highly honored throughout her life.

1. strongly agree
2. somewhat agree
3. Cannot decide
4. Do not agree to an extent
5. Do not agree at all

Flowchart

