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## Working Paper Gender effects in the battle of the sexes: A tale of two countries

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## Discussion Paper No. 2021-02

University of Nottingham

Fabrizio Adriani Monika Pompeo Silvia Sonderegger

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# Gender Effects in the Battle of the Sexes: a Tale of Two Countries

Fabrizio Adriani, Monika Pompeo and Silvia Sonderegger\*

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#### Abstract

In a setting where inequality is ingrained and largely unavoidable (battle of the sexes), we investigate whether subjects condition their behaviour on the gender of their co-player. In order to identify the role of culture and gender norms, we run the experiment in two countries, Norway and India, characterised by very different levels of gender inequality. We find different patterns of gender effects in the two countries. In India, subjects are more 'hawkish' when facing a woman. This occurs only for lower education subjects and is observed primarily in female participants. Highly educated Indian participants do not discriminate between male and female co-players. In Norway, the gender effect is the opposite of what observed in India: it is present only in highly educated male participants, and takes the form of subjects becoming more 'hawkish' when facing a man. Our evidence suggests that these gender effects may be due to subjects experiencing different levels of inequality aversion depending on the gender of their co-player, in a manner that is mediated by their culture and gender norms.

**JEL Codes:** C70, C99, J16

Keywords: gender, social norms, coordination, culture, inequality aversion

<sup>&</sup>lt;sup>\*</sup>Adriani: ULSB University of Leicester and CeDEx, fa148@le.ac.uk; Pompeo: School of Economics and CeDEx, University of Nottingham, Monika.Pompeo@nottingham.ac.uk; Sonderegger: School of Economics and CeDEx, University of Nottingham, Silvia.Sonderegger@nottingham.ac.uk. Financial support by British Academy small grant SRG1920n101050 is gratefully acknowledged.

#### 1 Introduction

Many situations in life are characterised by intrinsic inequality. Examples include hierarchies in the workplace or leadership within a team, which is typically the domain of only one team member. How do people behave (and expect others to behave) when unequal outcomes are unavoidable? Do men and women adapt their behaviour to the gender of their counterparts? What is the role of gender-related norms in guiding behaviour? These are important questions that have so far been understudied.

This paper aims to answer these questions by examining behaviour in a battle of the sexes game. A key feature of the battle of the sexes is that the players' choices either result in a payoff of zero for both (if the players fail to coordinate), or they generate positive payoffs (if the players coordinate) which, however, involve inequality: one player earns a higher payoff than the other. Clearly enough, each player would ideally like to earn the higher payoff, but this is not possible. If the players are to avoid earning zero, one must be willing to concede. Since the participants cannot communicate with each other, we expect that social norms and culture may be particularly relevant in guiding choices. To isolate the effect of gender, we employ a between subjects design where players are randomly allocated across control and treatment conditions. In the control condition, participants are matched with another player knowing only that he or she comes from their same country. In the treatment conditions, subjects know both the gender and the location of the other player. Behaviour in this game depends on preferences (e.g., attitudes towards payoff inequality), as well beliefs about the choices of others. We want to understand how gender enters into this picture and whether social norms play a role. In particular, the question we are interested in is whether our participants adapt their choice of action to the gender of their co-player.<sup>1</sup>

Most of the literature to date has focused on identifying trait differences – e.g. in (over-)confidence, altruism, risk aversion, competitiveness etc. – between men and women in a fixed cultural context (see e.g. the surveys by Croson & Gneezy, 2009; Niederle, 2015). However, culture and underlying social norms are also very important in shaping behaviour (Charles, Guryan, & Pan, 2018; Jayachandran, 2015), and this paper aims to shed further light on this less-studied dimension. To characterise the role of culture and social norms, we run our online experiment in two countries, India and Norway, that are

<sup>&</sup>lt;sup>1</sup>In what follows, we will use the terms 'co-player' and 'opponent' interchangeably, to indicate the player that a subject is matched with in the experiment.

characterized by very different gender norms and levels of gender inequality.<sup>2</sup>

There are several reasons why gender norms may matter in the game we consider. First, gender norms may act as a coordination device which focalises expectations about the equilibrium to be played. For instance, in societies where women have lower status and entitlement than men, subjects may naturally expect that everybody will coordinate on the man's preferred equilibrium (Cooper & Weber, 2020).

A second channel through which gender norms may matter is through their relationship with preferences. Clearly enough, social norms may themselves be a reflection of widespread preferences in the population. Perhaps more interestingly, the opposite may also be true: dominant norms may have a role in moulding preferences. Classical choice theory treats preferences as an exogenously fixed black-box, but there is an increasing consensus that they may actually be more fluid and malleable than that. Bowles (1998), for instance, compares the process of preference formation to the acquisition of an accent.<sup>3</sup> Intuitively, if in a society it is customary that men should obtain the upper hand whenever their interests clash with those of women, this will become the natural reference point, shaping what people find acceptable or unacceptable. As a result, in a gender-unequal society, subjects may find it more acceptable to have their co-player come on top when their co-player is a man rather than a woman – a form of gender-dependent aversion to inequality. It is also possible that subjects of both genders may come to believe that it is morally 'right' that men should earn a higher payoff than women.<sup>4</sup>

Gender effects in the form of subjects conditioning their behaviour on their co-player's gender have been documented by previous literature in contexts such as bargaining (Ayres & Siegelman, 1995; Eckel & Grossman, 2001; Sutter, Bosman, Kocher, & van Winden, 2009), dictator games (Ben-Ner, Kong, & Putterman, 2004), and ultimatum games (Solnick, 2001), always within a homogeneous cultural context. Görges (2020) considers a lab experiment where German (heterosexual) couples play a battle of the sexes in which the salience of gender roles is varied exogenously. The author's finding that women (but not men) respond strongly to gender roles salience is consistent with the observation by

 $<sup>^{2}</sup>$ For instance, Norway is classed 2nd and India is classed 112th out of 153 countries in the most recent Global Gender Gap Index rankings. Source: World Economic Forum (2020)

<sup>&</sup>lt;sup>3</sup>Recent empirical research argues that preferences respond to experiences such as cultural exposure (e.g., Atkin, 2013) and family influences (e.g., Fernández, Fogli, & Olivetti, 2004). See Bowles (1998) and Fehr and Hoff (2011) for general discussion of endogenous preferences, and Bernheim, Braghieri, Martínez-Marquina, and Zuckerman (2021) for a theoretical account.

 $<sup>^{4}</sup>$ A prominent theory in social psychology – justification theory – argues that, often, disadvantaged groups come to rationalise their lower status on objective grounds, presumably as part of a process of cognitive dissonance reduction (see e.g. the survey by Jost & Banaji, 1994).

Croson and Gneezy (2009) that, across a wide range of experiments, women appear more sensitive to social cues when choosing their actions compared to men. Our result that (lower-education) Indian women are more likely than men to adapt their behaviour to their co-player's gender is also in line with this 'rule of thumb'.

The work that is most related to ours is a study by Holm (2000). In a battle of the sexes game in which student participants from Sweden and the US are aware of the gender of their co-player, he finds that participants of both genders are more likely to behave hawkishly against women than against men.<sup>5</sup> The question is how to interpret this finding. As pointed out by the author himself, in this game, players are strongly incentivised to identify a focal point on which to coordinate. At the same time, they are also operating in a highly stylised environment where gender labels are essentially the only thing they can use as coordination device. This raises the possibility that gender effects may be driven primarily by coordination motives, and, as such, may bear little relation to underlying gender norms or gender inequality outside of the lab.

To address this and other issues, our design departs from Holm (2000) in a number of important respects. First, we elicit the subjects' expectations about the likely action of their co-player. This is done in order to distinguish between effects that are purely driven by coordination concerns as opposed to other mechanisms, such as aversion to disadvantageous inequality. Second, we include a treatment in which subjects are not informed of the gender of their co-player. This allows to identify any systematic differences (in preferences or beliefs) between men and women. Finally, our experiment includes a varied subject sample. We consider subjects from two countries (Norway and India) that exhibit very different levels of gender inequality. Our subjects also differ in terms of other characteristics, such as education level, allowing us to paint a more nuanced picture of gender effects.

Our results present a number of interesting findings. First, the more gender-unequal society (India) features stronger gender effects, as expected. Subjects condition their action choice on the gender of their co-player and are more likely to select the hawkish action (i.e., the action corresponding to their preferred equilibrium) when facing a woman. In Norway, on the other hand, the co-player's gender does not appear to matter except in one case, which we discuss below. Second, the gender effect we identify in our Indian subjects is not driven by expectations. This suggests that a preference-based (rather than

 $<sup>^{5}</sup>$ This result is, however, not replicated by Boschini et al. (2014), who find no gender effect in their study involving a large sample of the Swedish population.

an expectations-based) mechanism may be at play. Third, we find that the gender effect is strongest among Indian women with lower education. In this subgroup, the probability of selecting the hawkish action when matched with another woman increases by 20% compared to the case when subjects are matched with a man. Indian men with lower education also exhibit a higher propensity to behave hawkishly when facing a woman, but the effect is less pronounced. On the other hand, among highly educated Indians (university degree and above) we find no gender effect. These subjects behave in the same way independently of the gender of their co-player. In Norway, our data indicate that highly educated men also exhibit a gender effect, but this is the opposite of what observed in India: they are actually more likely to select the hawkish action when playing against a *man*. Again, the effect does not appear to be driven by expectations.

These results paint an interesting picture. Differences in country-wide gender norms translate into different incidence and direction of gender effects. We also identify withincountry variations. Gender effects arise only for lower-education subjects in India and (in the opposite direction) only for highly educated subjects in Norway. Furthermore, fixing a subject's country and level of education, gender effects depend on the gender of the subject, sometimes in unexpected ways. For instance, we find that lower education Indian women are actually more likely than men to discriminate between male and female co-players. None of the gender effects we identify appears to be expectation-based, indicating that our subjects do not use gender labels as a coordination device, and pointing instead to a preference-based mechanism. This suggests, for instance, that lower education Indian women are more dovish when playing against a male co-player *not* because they expect male co-players to be more aggressive than females, but because they find a situation where the male co-player earns the highest payoff relatively more acceptable.

Teasing out the different channels (expectations, preferences) through which gender effects may operate can have important implications for policy interventions aimed at improving the condition of women in gender-unequal societies. Consider for instance a situation where women have internalised the dominant gender norm, coming to perceive their lower status as something 'natural' which they do not mind too much, rather than as a state of affairs they would like to move away from. This could imply that policies that take the form of broadening up the range of options available to women may not be very effective unless they take place in conjunction with other interventions aimed at encouraging a stronger sense of female entitlement. Our design allows to shed light on the different drivers of gender effects.

The remainder of the paper is organised as follows. Section 2 discusses the experimental design and procedures, while Section 3 presents a conceptual framework that helps to understand the theoretical rationales for our treatments. Section 4 is devoted to our empirical results, and Section 5 concludes the paper.

### 2 Experimental Design and Procedures

Our online experiment considers a canonical coordination game that is particularly wellsuited to study environments with a conflict of interests: the battle of the sexes. Two players must simultaneously choose one of two actions, A or B. If both players select A, Player 1 earns 1000 points, and Player 2 earns 500, while if they both select B, Player 1 earns 500, and Player 2 earns 1000 points.<sup>6</sup> In what follows, we borrow Holm (2000)'s terminology and say that a player i 'plays hawkish' (or 'selects the hawkish action') if he or she chooses the action which, if both players were to coordinate upon it, would give i1000 points, while player i 'plays dovish' (or 'selects the dovish action') if he or she chooses the action which would give i 500 points. If one player chooses A and the other chooses B, they both earn 0 points. The structure of the game is summarised below.



We employ a between subjects design. Each subject played the game only once. Participants were always paired with a co-player from the same country and were randomly assigned to one of a series of treatments.<sup>7</sup> In the *Gender Unknown* treatment, players were informed that their co-player was from the same country but were not told about their gender (they only knew that the co-player was male or female with equal probability). In the *Gender Known* treatments, players were told both their co-player's gender and that he or she was from their same country. This generated a total of three cases, depending on the gender of both players: (i) female-female matches, (ii) male-male matches and (iii) mixed matches (female-male).

In all treatments, participants were made aware that their co-player had received the same

 $<sup>^{6}1000 \</sup>text{ points} = 60 \text{ NOK in Norway or } 220 \text{ INR in India.}$ 

<sup>&</sup>lt;sup>7</sup>For practical reasons, participants were paired ex-post rather than in real time.

information as they did (namely, the nationality and, in the Gender Known treatments, also the gender of the other player). To avoid experimenter demand effects or social desirability bias (which could affect the subjects' choices) in the Gender Known treatments, we tried to convey information about the co-player's gender without making it obvious that it was important for the study, whilst at the same time ensuring that subjects paid sufficient attention to it.<sup>8</sup> To this aim, we displayed the information about the co-player's gender and nationality with a few seconds' delay, and asked participants to wait until the information appeared.

Table A.1 in the Appendix reports the number of participants across countries and treatments. A total of 1676 respondents took part in our online study 802 in India and 874 in Norway. The experiment took place between the months of November 2020 and January 2021 and was programmed with the Qualtrics online platform.<sup>9</sup> Subjects were recruited both in Norway and India through the market research company Dynata, which is regularly used to conduct academic studies (e.g., see Haaland, Roth, & Wohlfart, 2020). The instructions were translated into both Hindi and Norwegian.<sup>10</sup> The experiment started with a number of questions on demographics, including gender, education level (primary, secondary, or university), place of residence (village, small town, or big city), and religiousness. The information on gender was later used to assign subjects to the treatments.<sup>11</sup> In the following stage, participants were informed about the main task and had to answer a series of control questions to check whether they understood the incentive structure of the study. Subjects were only given three attempts at answering these questions - those who failed to provide the correct answer more than three times were excluded from the experiment. Once players passed the control questions, and after having been informed about their co-player's characteristics (either gender + nationality or only nationality, depending on the treatment) they were asked to state which action they expected their co-player to

<sup>&</sup>lt;sup>8</sup>Currently, there is no commonly accepted way to convey gender in online experiments. Possible options include informing subjects of their co-player's first name (Chakraborty, 2019), using avatars (Charness, Cobo-Reyes, Sanches, & Meraglia, 2020), or using pictures (Castillo & Petrie, 2010). We did not choose any of these options in order to avoid the possibility that first names, avatars, or pictures might provide social cues (e.g., about social class, religion, or caste), which could act as confounding effects. Finally, Drouvelis, Gerson, Powdthavee, and Riyanto (2020) explore the implications of allowing participants to strategically choose to misrespresent their gender to their co-player. This was not possible in our experiment.

<sup>&</sup>lt;sup>9</sup>The study was pre-registered in the AEA RCT Registry: https://www.socialscienceregistry.org/trials/6272 <sup>10</sup>For consistency, in India our data collection mainly focused on Hindi-speaking states (see Appendix B for a complete list). Since India has 22 official languages, translating the experiment in each of them would not have been feasible. We therefore focused on the most commonly spoken language, Hindi, but also gave the option to complete the experiment in English. Detailed instructions can be found in Appendix B.

 $<sup>^{11}</sup>$ We also used the information on education to ensure sufficient within-treatment variation in the subjects' education.

choose. If they guessed correctly, we paid subjects 50 points on top of the final payoff.<sup>12</sup> Our measure of expectations is thus relatively coarse. On the one hand, this implies that it could fail to fully account for heterogeneity in expectations. On the other hand, it has the advantage of being simple and easy to understand by all participants. After expectations were elicited, participants were presented with the main task. Once they had chosen their action, they were asked a series of follow-up questions, including why they chose one option over the other, whether they recalled the gender of their co-player – in order to verify that the in the *Gender Known* treatments subjects had indeed paid attention to their opponent's gender – and what they thought was the purpose of the study – to verify whether subjects understood that we were conducting a study of gender effects.<sup>13</sup> Finally, we asked subjects to express their degree of agreement with a series of statements on gender roles and the position of women in the family, based on the World Value Survey (Inglehart et al., 2014). On average, it took the respondents 8 minutes to complete the experiment in its entirety.

## 3 Conceptual Framework

The game we consider entails a conflict of interests: although each player would ideally like to earn the 1000 points, this outcome is not possible for both of them. Someone has to concede if the players are to avoid earning zero points. The question is, who will choose to concede and who will choose to stand their ground? Since players are not allowed to communicate, each needs to form a conjecture about what the other player will do. However, this depends on what the other player expects *them* to do. Consider, for instance, a mixed match in which the subjects are informed of each other's genders. If the man thinks that his female co-player expects him to choose the hawkish action, he is indeed inclined to play hawkish, as he anticipates that she is likely to play dovish. The opposite is also true. A man who thinks that his female opponent expects him to choose the dovish action finds it optimal to play dovish, since he anticipates that she will play

<sup>&</sup>lt;sup>12</sup>Monetary incentives were thus much smaller than in the main task. This was done on purpose, to minimize the possibility that the subjects might misrepresent their true expectations in order to hedge their bets.

<sup>&</sup>lt;sup>13</sup>The results are presented in Table A.2; 92% of Indians and 96% of Norwegians correctly recalled their co-player's gender. Concerning the objective of the study, the most popular answers were selfishness and competitiveness, with less than 10% of male or female subjects in either country guessing gender. These data confirm that subjects paid enough attention to the gender of their opponent (when it was provided) but did not guess that gender was a central aspect of our study. Finally, in the *Gender Unknown*, treatment, we asked subjects to guess the gender of their co-player, and find that, in both countries, the share of subjects that believe the other player is a male is about 50%.

hawkish.

The above discussion highlights a key feature of the game: the presence of multiple equilibria.<sup>14</sup> For a player, different actions are optimal depending on which equilibrium is being played. In the absence of explicit communication, subjects will use salient social cues as focal points to solve this coordination problem. While same-gender matches lack a natural focal point, in mixed matches, gender is a clear candidate to play this role (Holm, 2000): if subjects expect their co-player to follow the 'man = dominant, woman = submissive' stereotype, they will find it optimal to conform to it themselves. In this case, their behavior will differ depending on whether they are in a same-gender or a mixed-gender match. Following Cooper and Weber (2020), we conjecture that the salience of gender increases according to the strength of gender norms in a society.

Another reason why we may observe gender effects is rooted in preferences. Preference may interact with gender in two ways. First, the utility of a player from a given outcome may depend on the gender of the co-player. For instance, a player may be more or less averse to have their co-player come on top depending on the co-player's gender – a form of gender-dependent inequality aversion. This could for instance imply that earning the lower payoff of 500 may be more acceptable if the co-player earning 1000 is, say, a man rather than a woman. If this is the case then, keeping everything else equal, subjects will be more likely to select the hawkish action when facing a woman.<sup>15</sup> There is some experimental evidence backing the notion that social preferences may depend on the gender of the subject's co-player. In the context of a dictator game, Ben-Ner et al. (2004), find that female dictators give systematically less to other women compared to men, thus expressing weaker other-regarding preferences when facing a woman. In a similar vein, Solnick (2001) finds that, in the ultimatum game, receivers (of both genders) choose a lower minimum acceptable offer when facing a male sender. This suggests that, when the sender is a man, receivers become less averse to disadvantageous inequality.

Again, we expect this kind of gender-dependence to be affected by the subjects' cultural environment. Intuitively, in more gender-unequal societies, women are used to finding

<sup>&</sup>lt;sup>14</sup>In the canonical case in which players are exclusively concerned with maximising own material payoff, the game has two pure strategy equilibria: (A, A) and (B, B). In each of these two equilibria, one player plays his or her hawkish action, and the other plays his or her dovish action. In addition, there is a mixed strategy equilibrium in which each player plays his or her hawkish action with probability  $\frac{2}{3}$ .

<sup>&</sup>lt;sup>15</sup>In our game, inequality aversion introduces the possibility of new equilibria. In particular, the equilibrium (A, B) – where both players select their hawkish action and obtain a payoff of zero – will arise whenever the subjects are sufficiently averse to earning a lower payoff than their co-player. It is worth mentioning that, although in the text we primarily focus on disadvantageous inequality aversion, people may of course also be averse to *advantageous* inequality. However, in our data, aversion to advantageous inequality does not seem to matter much. This is further discussed in Section 4.

themselves in a disadvantaged position compared to men, and men are used to being advantaged compared to women. In mixed matches, we may therefore envisage that men and women will evaluate their utility relative to this inegalitarian reference point. Compared to same-gender matches, where – in the absence of other social cues – the natural reference point is egalitarian, this would result in women being less and men being more averse to disadvantageous inequality when facing a member of the opposite sex. Another (related) mechanism is that, in more gender-unequal societies, people may 'internalize' the dominant social norm and come to believe that the differential status of men and women is legitimate and justified on objective grounds, which could result in the pattern of inequality aversion described above (this is the idea behind justification theory in social psychology, discussed e.g. in Jost, 2019).

It is also possible that the utility from a given outcome may depend on the subject's own gender. The existing literature has identified a number of dimensions in which the preferences of men and women differ, most notably competitiveness and confidence – men are more competitive and more (over-)confident than women (e.g. see Niederle & Vesterlund, 2007; Niederle, 2015). Suppose, for instance, that men are inherently more 'aggressive' or more inequality-averse than women. This may result in women behaving more dovishly in mixed matches compared to same-gender matches, since they anticipate that a male co-player is more likely to choose the hawkish action.

Our experimental design allows to shed light on the possible drivers of gender effects.

• By eliciting the subjects' beliefs about their co-player's choice of action, we are able to identify whether a gender effect is driven by expectations or whether it persists after expectations are accounted for. As we have seen, when gender acts as a coordination device, the gender of a subject's co-player affects behaviour by focalising expectations about the co-player's likely action. If the gender effect arises *even* when controlling for expectations, this rules out the 'gender as a coordination device' hypothesis and points to the presence of gender-dependent preferences. For instance, if we observe that subjects who expect their co-player to behave hawkishly are more likely to choose the hawkish action when facing a woman (or a man), this suggests that the subjects' aversion to disadvantageous inequality depends on the co-player's gender.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup>These gender-dependent preferences are also compatible with a gender-effect that is entirely driven by expectations. However, in that case, we would not be able to rule out that the gender effect rises simply because the subjects use (and expect others to use) gender as a coordination device.

• The *Gender Unknown* treatment allows to identify whether gender effects are driven by differences in underlying preferences between the two genders. If men and women differ in their innate "hawkishness", this will generate gender effects that mirror those arising when gender acts as a focal point, with an important difference: in this case, we should also observe that, in the *Gender Unknown* treatment, men and women behave differently, with the different behaviour being driven by different preferences. A recent survey by Falk and Hermle (2018) finds that the preferences of men and women differ more in more gender-equal societies. An interesting question is whether this prediction extends to our data.<sup>17</sup>

#### 4 Results

#### 4.1 Sample description

The descriptive statistics of our sample are reported in Table 1. As shown in the table, within each country, the profiles of men and women are similar.

	(1)	(2)	(3)	(4)	(5)
	Overall	India (F)	India (M)	Norway (F)	Norway (M)
	Mean (St.Dev.)	Mean (St.Dev.)	Mean (St.Dev.)	Mean (St.Dev.)	Mean (St.Dev.)
Demographics					
$Age^*$	$33.14\ (12.77\ )$	$31.31\ (10.53)$	27.94(9.80)	35.14(13.19)	38.92(14.59)
Country national	94% (.)	100% (.)	99%~(.)	87% (.)	91% (.)
Education					
Primary	4% (.)	1% (.)	2% (.)	7% (.)	5% (.)
Secondary	43% (.)	37% (.)	40% (.)	44% (.)	51% (.)
University degree	54% (.)	62% (.)	58% (.)	49% (.)	45% (.)
Religiousness					
Not Religious	28% (.)	7% (.)	10% (.)	49% (.)	51% (.)
Moderately religious	53% (.)	58% (.)	63% (.)	46% (.)	45% (.)
Very religious	18% (.)	35% (.)	27% (.)	4% (.)	5% (.)
Live					
Village	18% (.)	4% (.)	9% (.)	29% (.)	31% (.)
Small town	29% (.)	23% (.)	25% (.)	34% (.)	35% (.)
Big city	53% (.)	72% (.)	66% (.)	37% (.)	34% (.)
Main variables					
Expect Hawkish	70% (.)	69% (.)	70% (.)	74% (.)	66% (.)
Chose Hawkish	50% (.)	52% (.)	52% (.)	48% (.)	49% (.)
N	1678	427	449	403	399

Table 1: Summary statistics

*Notes:* Summary statistics of the participants. Variables are continuous when asterisked and binary otherwise. Country national is a binary variable which takes value one if the respondent claimed to be a citizen of the country where the experiment took place and zero otherwise.

<sup>&</sup>lt;sup>17</sup>The Gender Unknown treatment also allows to identify possible gender-specific biases in expectations about the likely action of their co-player – e.g., one gender being systematically more 'optimistic' than the other. Existing literature has shown that men tend to be significantly more optimistic than women on issues such as economic outlook and financial markets (see e.g. Jacobsen, Lee, Marquering, & Zhang, 2014). In our context, optimism (or pessimism) would belong to a different domain, as it would refer to beliefs about the likely action of a subject's co-player.

In terms of cross-country comparisons, Norwegian subjects are slightly older (36 years on average, versus 30 years in India) and more likely to live in a village compared to their Indian counterparts (30% versus 6% in India). On the other hand, Indian subjects are, on average, more religious. A noteworthy observation is that, in India, our subjects are much more likely to live in a big city relative to the population at large – 69% of our Indian subjects, while across India, the share of urban population is only 35% – and also have much higher education levels – 60% are university-educated, against 12% in the Indian population.<sup>18</sup> With that said, it is also worth noting that, in our sample, the share of Indian participants who completed only primary-level education is very small, 1.5%, implying that our 'lower-education' subjects are relatively highly educated: almost all of them have secondary-level education. These elements clearly place our Indian subjects in an elite group within a country characterised by high income inequality.

To the extent to which unequal gender norms are more ingrained in more traditional, less urban and less educated communities, we can expect that our Indian data will underestimate norm-mediated gender effects compared to what we would obtain if we had access to a fully representative sample. Finally, note that, compared to the Indian subjects, our Norwegian sample is more representative. The share of university-educated subjects is about 50% against a share of 44% in the whole population. The urban population is 83% in the whole country and 70% in our sample.<sup>19</sup>

Table 1 also reports the share of hawkish choices depending on gender and country, showing that the propensity to behave hawkishly is comparable along these dimensions. Beliefs about the opponent's action choice are also similar throughout. However, as we will see, these aggregate data mask important differences.

#### 4.2 Main results

In this section, we look for gender effects in Norway and India across the different treatments. The question we consider is whether participants condition their behaviour to the gender of their opponent. Previous studies have shown that people who are more educated tend to hold more egalitarian gender attitudes – see e.g. the influential early studies by Thornton, Alwin, and Camburn (1983) and Kane (1995), as well as more recent evidence by Du, Xiao, and Zhao (2021). This suggests that, in experiments like ours – where participants are heterogeneous in their education levels – it is essential to look at how

<sup>&</sup>lt;sup>18</sup>Sources: World Data Atlas (2020); Office of the Registrar General & Census Commissioner (2011).

<sup>&</sup>lt;sup>19</sup>Sources: OECD. (2019); World Data Atlas (2020).

subgroups with different educational backgrounds behave when facing a man or a woman. To implement this, for both countries and for both men and women, we estimate a model where the participant's education interacts with the opponent's gender (when known to the participant), as follows.

$$\Pr(Y_i = 1|X) = G\left(\alpha_0 + \alpha_1 EDU_i + \alpha_2 KNOWNOPP_i + \alpha_3 FEMOPP_i + \alpha_4 KNOWNOPP_i \times EDU_i + \alpha_5 FEMOPP_i \times EDU_i + \alpha_6 EXPECT_i + \sum_{j=1}^N \beta_j X_{ji}\right)$$
(1)

where  $Y_i = 1$  if the participant chooses the hawkish option – the option which, if selected by both players, generates the highest monetary payoff for the participant – and  $Y_i = 0$ otherwise, KNOWNOPP is a dummy returning one if the participant was informed of the opponent's gender, FEMOPP returns one if the participant knew the opponent's gender and the opponent was a female and EDU is a dummy variable returning one if the participant is university-educated.<sup>20</sup> We use the dummy EXPECT to control for beliefs about what the opponent is likely to play (equal to 1 if the participant expects the opponent to play hawk). In addition to expectations about co-player's choice of action, we include the following set of further controls: (1) the participant's age; (2) whether the participant lives in a village, small town, or big city (LIVE); (3) whether the hawkish option was presented as Option A or Option B (ROLE) (more on this below).<sup>21</sup> The parameters of interest are  $\alpha_2$  and  $\alpha_3$  – the coefficients of KNOWNOPP and FEMOPP - which capture the extent to which knowing that the opponent is a man or a woman, respectively, affects the behavior of lower-education participants. To identify gender effects in subjects with higher education, we also need to consider  $\alpha_4$  and  $\alpha_5$  – the coefficients of KNOWNOPP×EDU and FEMOPP×EDU. Since the interpretation of coefficients in non-linear models with interaction terms may be involved, in the main body, we consider a linear specification for G. The results do not depend on the specific functional form (Results for Probit can be found in the Supplementary Material).

**Results for India.** Table 2 estimates model (1) for our Indian subject pool, including and excluding expectations.<sup>22</sup> Columns 1 and 2 indicate that the coefficient of FEMOPP is positive and significant. This signals the presence of a gender effect in the form of subjects conditioning their actions on the gender of the co-player and becoming more

<sup>&</sup>lt;sup>20</sup>Since there are very few participants lacking a secondary school qualification, we pooled together those with secondary and primary school qualifications. This does not seem to affect the key results.

 $<sup>^{21}</sup>$ In the pooled regressions, we also included country fixed effect.

 $<sup>^{22}</sup>$ Equivalent estimates for the pooled sample can be found in Table A.3 in the Appendix.

hawkish when facing a woman. A possible explanation for this finding is that subjects may expect that a woman co-player is more likely to play dovish compared to a male. However, this hypothesis is not corroborated by the data: if we compare the coefficient of FEMOPP in column 1 (where expectations are excluded) with that in column 2 (where expectations are included), we see that it hardly moves. Columns 3 and 4 show that the effect arises primarily from Indian women with lower education. Note that this group does not display a particularly strong propensity to play dovishly against men relative to the treatment where the opponent's gender is unknown (the coefficient of KNOWNOPP is small). Rather, they only tend to be more hawkish when they know they are facing another woman. Importantly, the gender effect is confined to women with lower education: highly educated women do not condition their behaviour on the opponent's gender. To see this, note that if we sum the coefficients of FEMOPP and FEMOPP×EDU in columns 3 and 4, we obtain essentially zero.

INDIA	(1)	(2)	(3)	(4)	(5)	(6)
	Chose Hawkish					
	All	All	Female	Female	Male	Male
EDU	0.049	0.074	0.076	0.090	0.020	0.052
	(0.065)	(0.060)	(0.096)	(0.090)	(0.089)	(0.082)
KNOWNOPP	-0.113*	-0.091	-0.086	-0.064	-0.141	-0.116
	(0.066)	(0.059)	(0.095)	(0.085)	(0.091)	(0.084)
FEMOPP	0.159**	0.151***	0.208**	0.195**	0.132	0.129
	(0.062)	(0.058)	(0.092)	(0.084)	(0.084)	(0.080)
KNOWNOPP×EDU	0.074	0.047	0.008	-0.003	0.145	0.101
	(0.083)	(0.078)	(0.120)	(0.111)	(0.116)	(0.110)
FEMOPP×EDU	-0.193**	-0.196***	-0.252**	-0.250**	-0.154	-0.161
	(0.080)	(0.075)	(0.116)	(0.108)	(0.111)	(0.105)
EXPECT Hawk		-0.341***		-0.348***		-0.333***
		(0.032)		(0.047)		(0.044)
Cons	0.371***	0.589***	0.492***	0.680***	0.297***	0.511***
	(0.088)	(0.088)	(0.145)	(0.140)	(0.112)	(0.115)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
$R^2$	0.063	0.161	0.052	0.154	0.069	0.162
Obs	876	876	427	427	449	449

Table 2: Propensity to choose hawkish - OLS estimates for India

Notes: OLS estimates of the the baseline model. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, and expectations about the opponent's strategy. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Comparing columns 3 and 4 confirms that, although expectations about co-player's action considerably increase the model's overall fit, including them does not affect the coefficients of interest. This suggests that the gender effect may be preference-driven. The last two columns of the table consider male subjects. Highly educated men are unresponsive to their co-player's gender, similar to highly educated women. Men with lower education levels appear to somewhat condition their behavior on the gender of

their co-player, but the coefficients of FEMOPP are smaller than for (lower-education) women and not statistically significant. This is in line with the observation that, in many experiments, men are less responsive to social cues when choosing their actions (Croson & Gneezy, 2009). To better visualize the results, Figure 1 reports for all subsamples the difference in the probability of choosing the hawkish option when facing a female opponent relative to a male opponent in the Gender Known treatment. This is positive and statistically significant for Indian women with lower education, who are about 20% more likely to play hawkish when facing a woman. For lower-education Indian men the gender effect is comparable in size albeit not significant, while is entirely absent when considering highly educated subjects.



Figure 1: Difference in probability of playing hawkish when facing a female opponent compared to a male opponent. For each subgroup, we estimated the model  $y_i = \gamma_0 + \gamma_1 FEMOPP_i + \sum_{j=1}^n \beta_j X_{ij} + \epsilon_i$ . The figure shows the coefficient  $\gamma_1$  and its 95% confidence intervals for each subgroup. Controls are the same as in the baseline model (including expectations). The sample was restricted to the treatments in which the opponent's gender is known. Details in the supplementary material.

The issue of how to interpret the role of education is a complex one, since educational attainments are clearly correlated with cultural traits and socio-economic status, so that no causal effect of education on behaviour can be inferred. For instance, women with conservative gender attitudes may be both more dovish when facing men *and* have a lower propensity to pursue higher education. While we cannot make claims about causality, our data allows us to explore whether the differences we observe between highly educated and less educated Indian subjects arise from different views about the role of men and women in the family and in society. In order to address this issue, we re-estimate the model by replacing education with various proxies for gender attitudes. In particular, we use answers to survey questions where we ask our participants to report the extent to which

they agree with the following statements:

- 1. BEATING: 'It is fine for a husband to beat his wife if she behaves badly.'
- 2. JOBS: 'When jobs are scarce, men should have priority.'
- 3. INCOME: 'When a wife earns more than her husband, this causes problems within the household.'

Answers are recorded on a 1-5 scale, with 1 corresponding to 'strongly agree' and 5 to 'strongly disagree'. As one would expect, agreement with the statements tends to be negatively correlated with educational attainments.<sup>23</sup> However, we do not find that conservative gender attitudes can explain the gender effect in our Indian data. When we replace education with gender attitudes derived from our survey questions, all the interactions with the opponent's gender return small and insignificant coefficients (see Table A.6 in the Supplementary Material). It thus seems unlikely that the observed differences between more and less educated subjects are driven by the fact that highly educated subjects have more liberal gender attitudes.

**Results for Norway.** The picture for Norway differs substantially from India. Columns 1 and 2 in Table 3 indicate that, overall, Norwegian subjects do not condition their behaviour on the gender of their opponent. This is also confirmed for female participants (columns 3 and 4 and 1). For male subjects (last two columns), however, we see that the coefficient of KNOWNOPP×EDU is positive and significant. This implies that, compared to the benchmark where the opponent's gender is unknown, highly educated men become more aggressive when they know they are facing another man, and this persists even when expectations are accounted for. On the other hand, when facing a woman, their behaviour is the same as when they do not know the gender of their opponent.<sup>24</sup> A by-product of this is that, as highlighted in Figure 1, for highly educated men the probability playing the hawkish action when facing a woman is smaller than when they face a male co-player. This suggests the presence of a gender effect, which, however, takes the opposite form of what we identify in India. Note that our findings for Norway differ substantially from those obtained by Holm (2000) in a comparably progressive country: Sweden. A possible explanation is that Holm's study was run more than 20 years ago, and therefore reflects a

 $<sup>^{23}</sup>$ The correlation between the answers and education levels persists also when controlling for age and place of residence.

 $<sup>^{24}</sup>$ In the last two columns, the sum of the coefficients of KNOWNOPP×EDU and FEMOPP×EDU is not statistically different from zero.

reality that may no longer be applicable. Indeed, his results are not confirmed by a later study by Boschini et al. (2014) of the Swedish population. Finally, our data on gender attitudes indicate that, similar to the case of Indian subjects, the gender effect is not due to education acting as a proxy for gender views in our Norvegian sample (see Table A.7).

NORWAY	(1)	(2)	(3)	(4)	(5)	(6)
	Chose Hawkish					
	All	All	Female	Female	Male	Male
EDU	-0.070	-0.053	0.066	0.043	-0.224**	-0.176*
	(0.065)	(0.062)	(0.089)	(0.082)	(0.092)	(0.092)
KNOWNOPP	0.075	0.091	$0.147^{*}$	0.176**	0.041	0.040
	(0.058)	(0.056)	(0.082)	(0.078)	(0.083)	(0.081)
FEMOPP	0.001	-0.004	-0.013	-0.043	-0.027	-0.003
	(0.058)	(0.057)	(0.087)	(0.087)	(0.080)	(0.076)
KNOWNOPP×EDU	0.048	0.038	-0.191	-0.165	0.322***	$0.274^{**}$
	(0.087)	(0.083)	(0.119)	(0.111)	(0.123)	(0.122)
FEMOPP×EDU	-0.059	-0.049	0.063	0.074	-0.166	-0.155
	(0.084)	(0.081)	(0.121)	(0.119)	(0.117)	(0.113)
EXPECT Hawk		-0.301***		-0.325***		-0.261***
		(0.036)		(0.054)		(0.050)
Cons	0.390***	0.563***	0.209**	0.438***	0.550***	0.657***
	(0.070)	(0.070)	(0.101)	(0.104)	(0.097)	(0.096)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.020	0.095	0.015	0.093	0.061	0.119
Observations	802	802	403	403	399	399

Table 3: Propensity to choose hawkish - OLS estimates for Norway

Notes: OLS estimates of the the baseline model. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, and expectations about the opponent's strategy. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

#### 4.3 Discussion

We now try to shed light on the possible mechanisms behind the gender effects identified above. As discussed in Section 3, there are a number of (non-mutually exclusive) reasons why participants may condition their behaviour on the gender of the co-player:

- 1. Coordination. Participants use gender as a coordination device in mixed matches.
- 2. Gender-specific preference. Participants simply respond to gender differences in the underlying propensity to play hawkish.
- 3. Gender-dependent inequality aversion. Inequality aversion depends on the opponent's gender.

1. Coordination. The first hypothesis considers the possibility that, in mixed matches, subjects use gender to solve the coordination problem they face in the game. For instance, if subjects expect their co-player to follow the 'man=dominant, woman=submissive' stereo-type, then they find it optimal to follow it too. This mechanism crucially relies on gender

acting as a catalyst that dictates how the subjects expect their opponent to play in mixed matches (an *expectation-driven* mechanism).

In our data, however, the gender effects persist even after expectations are controlled for. In fact, accounting for expectations hardly changes the coefficients of interest. This is not to say that participants do not recognise the need to identify focal points to help coordination. In our experiment, when a participant's hawkish option is denoted as A, Option A is also the opponent's dovish option, and this is common knowledge. Hence, to the extent that labelling a choice as A makes it more salient than labelling as B, Option A provides a gender-independent focal point that participants may use to coordinate. Our data suggests that a good share of participants indeed did that: they tried to coordinate with their co-player by using the gender-independent coordination device of selecting the option denoted as A.<sup>25</sup> The key observation, though, is that gender does not appear to have been used as a coordination device in mixed matches.

2. Gender-specific preferences. Consider now the possibility that participants are simply responding to gender-related differences in preferences over hawkish or dovish behaviour. For instance, if women are inherently more 'dovish' while men are inherently more 'hawkish', then it might be actually optimal to select the hawkish action with higher probability when facing a woman. To investigate this channel, we start by assessing whether these gender-related differences in the propensity to play hawkish exist in the first place. To isolate possible differences in intrinsic preferences from the effect of the opponent's gender, we restrict attention to the *Gender Unknown* treatment. The results in Table 4 show that there does not seem to be much difference in how men and women behave when they do not know the gender of their opponent. The only exception is that of highly educated Norwegian men, who have a lower propensity to play hawkish than similarly educated women, although the effect is weak. This suggests that men and women do not differ in their inherent propensity to play hawkish or dovish, and, hence, explanation 2. is unlikely to drive our findings. Another important observation is that, similar to mechanism 1. discussed above, this explanation also works through expectations. If women are inherently more 'dovish', this should be reflected in the participants' expectations, and any residual effect of the opponent's gender should disappear once we control for expectations. As already argued, however, this is not what we see in the data. All things considered, we do

 $<sup>^{25}</sup>$ The coefficient of the ROLE variable is significant at the 1% level for most subsamples (see full regression tables in the Appendix). Note that this gender-independent coordination device was not available in Holm (2000)'s study, since, in that study, options were not labelled.

not find much support for the hypothesis that participants optimally respond to gender differences in inherent propensity to play hawkish.

3. Gender-dependent inequality aversion. The third possible explanation for the gender effects we observe in our data is that the subjects may experience different degrees of inequality aversion depending on the gender of their opponent.

	ALL		INI	DIA	NORWAY	
	(1)	(2)	(3)	(4)	(5)	(6)
High EDU	-0.090 (0.061)	-0.053 (0.059)	-0.036 (0.076)	-0.011 (0.073)	$-0.177^{*}$ (0.094)	-0.131 (0.094)
Low EDU	-0.089 (0.065)	-0.061 (0.061)	-0.032 (0.102)	-0.040 (0.092)	-0.121 (0.084)	-0.077 (0.081)
EXPECTATIONS	No	Yes	No	Yes	No	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes
$R^2$	0.021	0.120	0.092	0.196	0.037	0.116
Obs	509	509	257	257	252	252

Table 4: Gender differences in propensity to choose hawkish (Men - Women)

*Notes:* OLS estimates of gender differences in the propensity to play hawk. Robust standard errors in parentheses. The sample is restricted to the treatment in which the opponent's gender is unknown. Controls are the same as in the baseline model (see Table 2). \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01.

To explore this possibility, we divide the sample into participants who expect their opponent to choose the hawkish action and those who expect their opponent to play the dovish option. Suppose, for instance, that people are more averse to letting their opponent come out on top (disadvantageous inequality) when the opponent is a woman. Then, conditional on expecting the opponent to select the hawkish action, they should have a higher propensity to behave hawkishly when facing a woman. Looking at the subsample of subjects who expect their opponent to play the dovish action similarly allows us to identify whether the gender of the opponent affects the subjects' aversion to advantageous inequality.

The results in Table 5 indicate that aversion to advantageous inequality does not depend on the co-player's gender. However, aversion to disadvantageous inequality does: when subjects expect their opponent to select the hawkish action, they conform to the pattern illustrated in Table 1. This is particularly true of Indian women with lower education. When considering the subsample who expect the opponent to play hawkish, the coefficient of FEMOPP increases relative to the baseline model, while it becomes smaller (and not statistically significant) when focusing on the subsample expecting the opponent to play dovish.

	INI	DIA	IND	IA: F	IND	[A: M
Expect opp play:	Hawk	Dove	Hawk	Dove	Hawk	Dove
	(1)	(2)	(3)	(4)	(5)	(6)
EDU	0.155**	-0.119	0.167	-0.079	0.140	-0.144
	(0.076)	(0.097)	(0.113)	(0.155)	(0.103)	(0.128)
KNOWNOPP	-0.075	-0.094	-0.081	0.013	-0.056	-0.226
	(0.075)	(0.093)	(0.105)	(0.137)	(0.106)	(0.137)
FEMOPP	$0.173^{**}$	0.088	$0.241^{**}$	0.062	0.119	0.171
	(0.072)	(0.091)	(0.109)	(0.115)	(0.097)	(0.136)
KNOWNOPP×EDU	0.047	0.023	0.018	-0.094	0.070	0.166
	(0.097)	(0.126)	(0.138)	(0.183)	(0.136)	(0.179)
FEMOPP×EDU	-0.265***	-0.048	-0.325**	-0.051	-0.219*	-0.094
	(0.094)	(0.118)	(0.139)	(0.160)	(0.131)	(0.171)
Constant	0.287***	0.545***	$0.353^{*}$	0.675***	0.221	0.430**
	(0.109)	(0.133)	(0.202)	(0.204)	(0.139)	(0.180)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.062	0.088	0.049	0.023	0.063	0.125
Observations	608	268	293	134	315	134

Table 5: Propensity to choose hawkish – OLS estimates conditional on expected opponent's choice

	N	OR	NO	B∙ F	R∙ M	
Expect opp play:	Hawk	Dove	Hawk	Dove	Hawk (5)	Dove
EDU	-0.067	0.010	0.004	0.085	-0.149	-0.327*
KNOWNOPP	(0.074) 0.103 (0.069)	(0.116) 0.090 (0.097)	(0.098) $0.208^{**}$ (0.090)	(0.150) 0.058 (0.166)	(0.110) -0.008 (0.108)	(0.168) 0.116 (0.124)
FEMOPP	(0.003) -0.002 (0.071)	(0.037) -0.039 (0.095)	(0.000) -0.001 (0.100)	(0.100) -0.136 (0.178)	-0.016 (0.101)	(0.124) (0.012) (0.115)
KNOWNOPP×EDU	0.024 (0.100)	0.052 (0.149)	-0.186 (0.130)	0.053 (0.216)	$0.318^{**}$ (0.153)	0.302 (0.207)
FEMOPP×EDU	-0.046 (0.099)	-0.028 (0.144)	0.108 (0.137)	-0.095 (0.238)	$-0.241^{*}$ (0.144)	0.046 (0.186)
Constant	$0.199^{**}$ (0.080)	$\begin{array}{c} 0.747^{***} \\ (0.117) \end{array}$	$\begin{array}{c} 0.052 \\ (0.105) \end{array}$	$\begin{array}{c} 0.651^{***} \\ (0.213) \end{array}$	$\begin{array}{c} 0.361^{***} \\ (0.126) \end{array}$	$0.720^{***}$ (0.149)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.028	-0.003	0.054	-0.048	0.036	0.069
Observations	564	238	300	103	264	135

Notes: Participants' choices conditional on whether they expect their opponent to play hawk or dove (OLS estimates). The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are the same as in the baseline model (see Table 2). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

While this should not be taken as fully conclusive evidence, it is highly suggestive that lower-education Indian women (and, to an extent, lower-education Indian men) are more inclined to sacrifice monetary rewards to avoid finishing last when facing a female opponent relative to a male opponent. The gender effect we identify for Norway can be similarly rationalised by a mechanism of aversion to disadvantageous inequality which depends on the opponent's gender. Indeed, Table 5 shows that highly educated Norwegian men are averse to disadvantageous inequality when facing another man, while they mind it less when playing against a woman.

### 5 Concluding Remarks

Our analysis makes a number of interesting points. First, the gender effects we identify in the battle of the sexes differ substantially in the two countries we consider – Norway and India. This suggests that behaviour in the game is informative about the environment the subjects operate in, and might potentially be used as a behaviour-based measure of country-level gender inequality. It would be interesting to run the experiment in more countries in order to gather additional evidence and identify possible patterns.

Second, our investigation highlights the importance of considering subjects from a variety of backgrounds and, in particular, different levels of education, in order to gain an organic picture of gender effects in a society. We find substantial variation in gender effects depending on education. For instance, university-educated Indian subjects exhibits no gender effects at all, in contrast to what we find for subjects with lower levels of education. This suggests that different gender cultures may exist in different strata of the population. Another intriguing finding is that gender effects may arise in the opposite direction to what one would normally expect, taking the form of subjects – in particular highly educated Norwegian men – being less hawkish when playing against a female opponent. A possible explanation could be that, in a country such as Norway which is highly attentive to gender issues, men could develop an aversion to behaving in a way that could potentially be interpreted as sexist. This could induce them to become less aggressive when interacting with a woman. The fact that this is observed only in highly educated subjects again points to the possible existence of potentially different sub-cultures in the population.

Finally, we find it very interesting that, in India, the gender effect is stronger among female (less educated) subjects, who are more likely to adapt their behaviour to the gender of their counterpart. Our analysis provides suggestive evidence that this is not necessarily because they expect a male opponent to be more 'hawkish', but rather it is due to women being comparatively less averse to inequality when facing a man. There is a general point here, namely that what is considered 'fair' or acceptable in mixed gender interactions may differ across societies and socio-economic groups depending on prevailing social norms.<sup>26</sup> This may of course generate additional challenges when it comes to designing policies aimed at empowering disadvantaged groups. We believe that this is a very interesting area for future research.

 $<sup>^{26}</sup>$  For instance, Sardinha and Catalán (2018) report attitudes from 49 low- and middle-income countries about domestic violence. On average, 41% of women agree that a husband is sometimes justified in beating his wife.

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## A Appendix: Supplementary Tables

Country	F	М	$\mathbf{FF}$	$\mathbf{FM}$	MM	MF	Total
INDIA	125	132	141	161	156	161	874
NORWAY	130	122	124	149	128	149	802
Total	255	254	265	310	284	310	1676

Table A.1: Number of participants by country and treatment

The label F (resp, M) indicates women (resp., men) in the Gender Unknown treatment. The label Fx (where x is either F or M) indicates women in the Gender Known treatment who are matched with a subject of gender x. The label Mx is defined analogously. As mentioned, in India our data collection exercise focused mainly on Hindi-speaking states Hindi-speaking states, namely Bihar, Chhattisgarh, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Uttarakhand, the union territory of Chandigarh, and the National Capital Territory of Delhi.

Table A.2: Recall rates and study objective

	Overall	INDIA: F	INDIA: M	NORWAY: F	NORWAY: M	
Correct recall COUNTRY	98%	99%	98%	97%	96%	
Correct recall SEX	95%	91%	94%	99%	97%	
Guess MALE	51%	59%	46%	54%	47%	
PURPOSE OF THE STUDY						
Selfishness	53%	37%	51%	60%	63%	
Competitiveness	33%	48%	39%	21%	20%	
Gender	6%	6%	2%	9%	8%	
Other	9%	9%	8%	1%	9%	
Ν	1678	427	449	403	399	

*Notes*: The table reports the shares of correctly recalled country and sex of Player 2. For the treatments in which the gender of the other player is not known, we asked participants to guess the gender of Player 2. Finally, we report the share of guesses about the study's objective.

	(1)	(2)	(3)	(4)	(5)	(6)
	Chose Hawkish					
	All	All	Female	Female	Male	Male
INDIA	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)
NOBWAY	-0.055**	-0.048*	-0.069*	-0.047	-0.024	-0.035
100100011	(0.027)	(0.026)	(0.038)	(0.036)	(0.040)	(0.038)
EDU	0.007	0.026	0.080	0.082	0.060	0.020
EDU	(0.046)	(0.020)	(0.065)	(0.061)	-0.009	-0.029
	(0.040)	(0.045)	(0.005)	(0.001)	(0.004)	(0.002)
KNOWNOPP	-0.008	0.011	0.040	0.063	-0.048	-0.037
	(0.044)	(0.041)	(0.062)	(0.058)	(0.062)	(0.059)
FEMOPP	0.069	0.063	0.098	0.076	0.041	0.054
	(0.043)	(0.040)	(0.063)	(0.061)	(0.059)	(0.055)
FEMOPP×EDU	-0.115**	-0.113**	-0.104	-0.098	-0.140*	-0.139*
	(0.057)	(0.055)	(0.083)	(0.080)	(0.080)	(0.076)
KNOWNOPP×EDU	0.034	0.014	-0.111	-0 104	0 184**	0.140*
Into whom where	(0.060)	(0.057)	(0.084)	(0.079)	(0.085)	(0.082)
ACE	0.009**	0.009**	0.004***	0.004***	0.000	0.001
AGE	(0.002)	(0.002)	(0.004)	(0.004)	(0.001)	(0.001)
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
LIVE						
Village	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)
Small town	-0.084**	-0.069*	-0.092*	-0.087*	-0.080	-0.055
	(0.037)	(0.036)	(0.054)	(0.052)	(0.050)	(0.049)
Big city	0.044	0.020	0.055	0.051	0.034	0.000
Dig city	(0.037)	(0.036)	(0.055)	(0.053)	(0.050)	(0.048)
DOLD	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(01010)
ROLE						
Hawk Option B	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)
Hawk Option A	0.179***	0.171***	0.157***	0.146***	0.208***	0.203***
	(0.024)	(0.023)	(0.034)	(0.033)	(0.034)	(0.032)
EXPECTATIONS						
EXPECT Dove		0.000		0.000		0.000
		(.)		(.)		(.)
EXPECT Hawk		-0.323***		-0.333***		-0.310***
		(0.024)		(0.035)		(0.033)
Constant	0.200***	0 504***	0.991***	0 == 0***	0 457***	0.610***
Constant	(0.055)	(0.055)	(0.084)	0.558	(0.457)	$(0.018 \cdots)$
	(0.000)	(0.000)	(0.004)	(0.003)	(0.014)	(0.014)
R-squared	0.037	0.124	0.032	0.121	0.045	0.127
Observations	1678	1678	830	830	848	848

Table A.3: Propensity to choose hawkish - pooled sample

Notes: Full tables for the baseline model - All Sample. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, expectations about the opponent's strategy, and country fixed effects. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	(1) Chose Hawkish All	(2) Chose Hawkish All	(3) Chose Hawkish Female	(4) Chose Hawkish Female	(5) Chose Hawkish Male	(6) Chose Hawkish Male
EDU	0.049 (0.065)	0.074 (0.060)	0.076 (0.096)	$0.090 \\ (0.090)$	0.020 (0.089)	$0.052 \\ (0.082)$
KNOWNOPP	$-0.113^{*}$ (0.066)	-0.091 (0.059)	-0.086 (0.095)	-0.064 (0.085)	-0.141 (0.091)	-0.116 (0.084)
FEMOPP	$0.159^{**}$ (0.062)	$0.151^{***}$ (0.058)	$0.208^{**}$ (0.092)	$0.195^{**}$ (0.084)	$ \begin{array}{c} 0.132 \\ (0.084) \end{array} $	0.129 (0.080)
FEMOPP×EDU	$-0.193^{**}$ (0.080)	$-0.196^{***}$ (0.075)	$-0.252^{**}$ (0.116)	$-0.250^{**}$ (0.108)	-0.154 (0.111)	-0.161 (0.105)
KNOWNOPP×EDU	$\begin{array}{c} 0.074 \\ (0.083) \end{array}$	$0.047 \\ (0.078)$	$0.008 \\ (0.120)$	-0.003 (0.111)	$0.145 \\ (0.116)$	$0.101 \\ (0.110)$
AGE	$0.004^{***}$ (0.002)	$0.003^{**}$ (0.002)	0.003 (0.002)	0.002 (0.002)	$0.006^{**}$ (0.002)	$0.005^{**}$ (0.002)
LIVE						
Village	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Small town	-0.100 (0.072)	-0.066 (0.071)	$-0.231^{*}$ (0.119)	-0.138 (0.115)	-0.020 (0.091)	-0.015 (0.092)
Big city	-0.097 (0.070)	-0.059 (0.069)	-0.168 (0.118)	-0.077 (0.114)	-0.075 (0.086)	-0.061 (0.087)
ROLE						
Hawk Option B	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Hawk Option A	$\begin{array}{c} 0.232^{***} \\ (0.033) \end{array}$	$\begin{array}{c} 0.223^{***} \\ (0.031) \end{array}$	$0.209^{***}$ (0.047)	$\begin{array}{c} 0.194^{***} \\ (0.045) \end{array}$	$\begin{array}{c} 0.254^{***} \\ (0.046) \end{array}$	$0.250^{***}$ (0.044)
EXPECTATIONS						
EXPECT Dove		0.000 (.)		0.000 (.)		0.000 (.)
EXPECT Hawk		$-0.341^{***}$ (0.032)		$-0.348^{***}$ (0.047)		$-0.333^{***}$ (0.044)
Constant	$0.371^{***}$ (0.088)	$0.589^{***}$ (0.088)	$\begin{array}{c} 0.492^{***} \\ (0.145) \end{array}$	$0.680^{***}$ (0.140)	$\begin{array}{c} 0.297^{***} \\ (0.112) \end{array}$	$\begin{array}{c} 0.511^{***} \\ (0.115) \end{array}$
R-squared Observations	0.063 876	0.161 876	0.052 427	0.154 427	$0.069 \\ 449$	0.162 449

Table A.4: Propensity to choose hawkish - Indian sample

Notes: Full tables for the baseline model - India. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, and expectations about the opponent's strategy. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	(1)	(2)	(3)	(4)	(5)	(6)
	Chose Hawkish	Chose Hawkish	Chose Hawkish	Chose Hawkish	Chose Hawkish	Chose Hawkish
	All	All	Female	Female		Male
EDU	-0.070 (0.065)	-0.053 (0.062)	(0.066) (0.089)	(0.043) (0.082)	(0.092)	$-0.176^{*}$ (0.092)
KNOWNOPP	0.075 (0.058)	0.091 (0.056)	$0.147^{*}$ (0.082)	$0.176^{**}$ (0.078)	0.041 (0.083)	0.040 (0.081)
FEMOPP	0.001 (0.058)	-0.004 (0.057)	-0.013 (0.087)	-0.043 (0.087)	-0.027 (0.080)	-0.003 (0.076)
FEMOPP×EDU	-0.059 (0.084)	-0.049 (0.081)	0.063 (0.121)	0.074 (0.119)	-0.166 (0.117)	-0.155 (0.113)
KNOWNOPP×EDU	0.048 (0.087)	$0.038 \\ (0.083)$	-0.191 (0.119)	-0.165 (0.111)	$\begin{array}{c} 0.322^{***} \\ (0.123) \end{array}$	$0.274^{**}$ (0.122)
AGE	$0.001 \\ (0.001)$	$0.002 \\ (0.001)$	$0.005^{**}$ (0.002)	$0.005^{***}$ (0.002)	-0.002 (0.002)	-0.001 (0.002)
LIVE						
Village	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Small town	$-0.079^{*}$ (0.044)	-0.069 (0.043)	-0.031 (0.064)	-0.037 (0.062)	$-0.130^{**}$ (0.061)	$-0.103^{*}$ (0.060)
Big city	-0.028 (0.045)	-0.017 (0.043)	-0.033 (0.065)	-0.043 (0.063)	-0.004 (0.063)	0.024 (0.060)
ROLE						
Hawk Option B	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Hawk Option A	$0.118^{***}$ (0.035)	$\begin{array}{c} 0.111^{***} \\ (0.034) \end{array}$	$0.088^{*}$ (0.050)	$0.078 \\ (0.049)$	$0.163^{***}$ (0.049)	$0.156^{***}$ (0.048)
EXPECTATIONS						
EXPECT Dove		0.000 (.)		0.000 (.)		0.000 (.)
EXPECT Hawk		$-0.301^{***}$ (0.036)		$-0.325^{***}$ (0.054)		$-0.261^{***}$ (0.050)
Constant	$\begin{array}{c} 0.390^{***} \\ (0.070) \end{array}$	$\begin{array}{c} 0.563^{***} \\ (0.070) \end{array}$	$0.209^{**}$ (0.101)	$\begin{array}{c} 0.438^{***} \\ (0.104) \end{array}$	$0.550^{***}$ (0.097)	$0.657^{***}$ (0.096)
R-squared Observations	0.020 802	$0.095 \\ 802$	$0.015 \\ 403$	$0.093 \\ 403$	$0.061 \\ 399$	0.119 399

Table A.5: Propensity to choose hawkish - Norwegian sample

Notes: Full tables for the baseline model - Norway. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, and expectations about the opponent's strategy. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

INDIA	op var. proj	Women	noose nawk	511	Men	
INDIA	beating (1)	jobs (2)	income (3)	beating (4)	jobs (5)	income (6)
KNOWNOPP	-0.212 (0.171)	-0.131 (0.158)	-0.066 (0.153)	-0.038 (0.202)	-0.125 (0.167)	-0.015 (0.167)
FEMOPP	-0.152 (0.169)	-0.055 (0.153)	$\begin{array}{c} 0.021 \\ (0.147) \end{array}$	-0.165 (0.186)	$\begin{array}{c} 0.155 \\ (0.161) \end{array}$	-0.100 (0.162)
BEATING	$-0.089^{***}$ (0.033)			-0.024 (0.035)		
KNOWNOPP×BEATING	$\begin{array}{c} 0.030 \\ (0.040) \end{array}$			-0.003 (0.046)		
FEMOPP×BEATING	$\begin{array}{c} 0.049 \\ (0.039) \end{array}$			$\begin{array}{c} 0.049 \\ (0.043) \end{array}$		
JOBS		-0.044 (0.029)			-0.015 (0.030)	
KNOWNOPP×JOBS		0.014 (0.038)			0.018 (0.041)	
FEMOPP×JOBS		0.025 (0.036)			-0.029 (0.039)	
INCOME			-0.021 (0.033)			-0.029 (0.034)
KNOWNOPP×INCOME			-0.006 (0.043)			-0.012 (0.045)
FEMOPP×INCOME			$\begin{array}{c} 0.010 \\ (0.042) \end{array}$			$\begin{array}{c} 0.041 \\ (0.043) \end{array}$
Constant	$0.996^{***}$ (0.201)	$0.750^{***}$ (0.187)	$\begin{array}{c} 0.639^{***} \\ (0.189) \end{array}$	$\begin{array}{c} 0.374^{**} \\ (0.183) \end{array}$	$\begin{array}{c} 0.333^{*} \\ (0.173) \end{array}$	$0.388^{**}$ (0.167)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.061	0.045	0.043	0.064	0.063	0.066
Observations	427	427	427	449	449	449

Table A.6: Role of conservative/liberal gender attitudes – India

Dep var: propensity to choose hawkish

Notes: OLS estimates of propensity to choose hawkish conditional on conservative/liberal gender attitudes in India. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. BEATING: Agreement with the statement 'It is fine for a husband to beat his wife if she behaves badly'. JOBS: Agreement with 'When jobs are scarce, men should have priority'. INCOME: Agreement with 'When a wife earns more than her husband, this causes problems within the household'. Answers range from 1 to 5, where 1 = strongly agree and 5 = strongly disagree. Controls are the same as in the baseline model (see Table 2). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

NORWAY Women Men							
	beating (1)	jobs (2)	$\begin{array}{c} \mathrm{income} \\ \mathrm{(3)} \end{array}$	beating (4)	jobs (5)	income (6)	
KNOWNOPP	$\begin{array}{c} 0.475 \\ (0.580) \end{array}$	$0.398 \\ (0.417)$	-0.049 (0.232)	$0.784^{**}$ (0.329)	$0.091 \\ (0.318)$	0.348 (0.239)	
FEMOPP	-0.101 (0.251)	-0.469 (0.433)	$\begin{array}{c} 0.153 \\ (0.242) \end{array}$	-0.253 (0.489)	-0.138 (0.376)	-0.279 (0.249)	
BEATING	-0.073 (0.112)			$0.098^{**}$ (0.048)			
KNOWNOPP×BEATING	-0.085 (0.118)			$-0.126^{*}$ (0.069)			
FEMOPP×BEATING	$\begin{array}{c} 0.023 \\ (0.053) \end{array}$			$\begin{array}{c} 0.031 \\ (0.100) \end{array}$			
JOBS		-0.042 (0.077)			-0.025 (0.052)		
KNOWNOPPXJOBS		-0.072 (0.087)			$\begin{array}{c} 0.020\\ (0.071) \end{array}$		
FEMOPP×JOBS		$\begin{array}{c} 0.102 \\ (0.090) \end{array}$			$\begin{array}{c} 0.007\\ (0.080) \end{array}$		
INCOME			-0.016 (0.042)			$\begin{array}{c} 0.038 \\ (0.042) \end{array}$	
KNOWNOPP×INCOME			$\begin{array}{c} 0.027\\ (0.057) \end{array}$			-0.043 (0.059)	
FEMOPP×INCOME			-0.034 (0.059)			$\begin{array}{c} 0.041 \\ (0.059) \end{array}$	
Constant	$\begin{array}{c} 0.614 \\ (0.563) \end{array}$	$\begin{array}{c} 0.459 \\ (0.381) \end{array}$	$\begin{array}{c} 0.313 \ (0.194) \end{array}$	$\begin{array}{c} 0.022\\ (0.234) \end{array}$	$0.598^{**}$ (0.249)	$\begin{array}{c} 0.332^{*} \\ (0.189) \end{array}$	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	
R-squared	0.022	0.016	0.007	0.049	0.043	0.046	
Observations	403	403	403	399	399	399	

Table A.7: Role of conservative/liberal gender attitudes – Norway

Dep var:	propensity	to choose	hawkish
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Notes: OLS estimates of propensity to choose hawkish conditional on conservative/liberal gender attitudes in Norway. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. BEAT-ING: Agreement with the statement 'It is fine for a husband to beat his wife if she behaves badly'. JOBS: Agreement with 'When jobs are scarce, men should have priority'. INCOME: Agreement with 'When a wife earns more than her husband, this causes problems within the household'. Answers range from 1 to 5, where 1 = strongly agree and 5 = strongly disagree. Controls are the same as in the baseline model (see Table 2). \* p <0.10, \*\* p < 0.05, \*\*\* p < 0.01.

## **B** Supplementary material (for online publication)

#### B.1 Full regression output for Figure 1

	INDIA				NORWAY			
	L EDU	H EDU	L EDU	H EDU	L EDU	H EDU	L EDU	H EDU
	Women	Women	Men	Men	Women	Women	Men	Men
FEMOPP	$0.196^{**}$ (0.084)	-0.046 (0.070)	$\begin{array}{c} 0.126 \\ (0.082) \end{array}$	-0.037 (0.069)	$\begin{array}{c} 0.004 \\ (0.088) \end{array}$	$\begin{array}{c} 0.033 \\ (0.082) \end{array}$	-0.013 (0.076)	$-0.159^{*}$ (0.085)
AGE	-0.004 (0.003)	-0.002 (0.004)	$0.008^{**}$ (0.004)	-0.000 (0.004)	$0.002 \\ (0.003)$	$0.005 \\ (0.004)$	-0.001 (0.003)	$\begin{array}{c} 0.001 \\ (0.003) \end{array}$
LIVE								
Village	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Small town	$0.082 \\ (0.126)$	$-0.444^{*}$ (0.265)	$\begin{array}{c} 0.041 \\ (0.137) \end{array}$	-0.093 (0.179)	-0.063 (0.103)	-0.088 (0.111)	$-0.186^{**}$ (0.091)	-0.136 (0.108)
Big city	0.041 (0.126)	-0.222 (0.249)	$\begin{array}{c} 0.002 \\ (0.136) \end{array}$	-0.054 (0.156)	-0.023 (0.111)	-0.121 (0.110)	0.020 (0.105)	$0.002 \\ (0.109)$
ROLE								
Hawk Option B	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Hawk Option A	$0.154^{*}$ (0.082)	$\begin{array}{c} 0.241^{***} \\ (0.069) \end{array}$	$0.165^{**}$ (0.082)	$\begin{array}{c} 0.318^{***} \\ (0.069) \end{array}$	$\begin{array}{c} 0.250^{***} \\ (0.087) \end{array}$	$\begin{array}{c} 0.101 \\ (0.082) \end{array}$	$0.189^{**}$ (0.078)	$0.191^{**}$ (0.086)
EXPECTATIONS								
EXPECT Dove	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
EXPECT Hawk	$-0.545^{***}$ (0.086)	$-0.264^{***}$ (0.071)	$-0.333^{***}$ (0.088)	$-0.288^{***}$ (0.069)	-0.151 (0.098)	$-0.354^{***}$ (0.097)	$-0.320^{***}$ (0.078)	$-0.280^{***}$ (0.090)
Constant	$\begin{array}{c} 0.778^{***} \\ (0.159) \end{array}$	$\begin{array}{c} 0.907^{***} \\ (0.267) \end{array}$	$0.338^{*}$ (0.185)	$\begin{array}{c} 0.671^{***} \\ (0.195) \end{array}$	$\begin{array}{c} 0.481^{***} \\ (0.162) \end{array}$	$\begin{array}{c} 0.575^{***} \\ (0.189) \end{array}$	$\begin{array}{c} 0.764^{***} \\ (0.134) \end{array}$	$\begin{array}{c} 0.703^{***} \\ (0.189) \end{array}$
R-squared	0.256	0.143	0.106	0.155	0.045	0.081	0.155	0.128
Observations	115	187	138	179	134	139	148	129

Table B.1: Regression output for Figure 1

Notes: Change in probability of playing hawk when facing a female opponent compared to a male opponent. For each subgroup, we estimated the model  $y_i = \gamma_0 + \gamma_1 FEMOPP_i + \sum_{j=1}^n \beta_j X_{ij} + \epsilon_i$ . The figure shows the coefficients for FEMOPP and their 95% confidence intervals for each subgroup. Controls are the same as in the baseline model (including expectations). Robust standard errors in parentheses. The sample was restricted to the treatments where the opponent's gender is known. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

## C Probit estimates

	(1)	(2)	(3)	(4)	(5)	(6)
	Chose Hawkish	Chose Hawkish	Chose Hawkish Formalo	Chose Hawkish Formalo	Chose Hawkish Malo	Chose Hawkish Malo
	0.000	0.000	0.000	0.000	0.000	0.000
INDIA	(.)	(.)	(.)	(.)	(.)	(.)
NORWAY	-0.143** (0.070)	-0.139* (0.072)	-0.178* (0.098)	-0.141 (0.100)	-0.062 (0.104)	-0.104 (0.108)
EDU	0.017 (0.118)	0.073 (0.121)	0.231 (0.166)	0.234 (0.170)	-0.180 (0.167)	-0.079 (0.174)
KNOWNOPP	-0.022 (0.113)	0.036 (0.117)	$0.105 \\ (0.160)$	$0.193 \\ (0.164)$	-0.126 (0.162)	-0.105 (0.166)
FEMOPP	$0.178 \\ (0.110)$	0.177 (0.113)	0.254 (0.163)	$0.206 \\ (0.169)$	$0.106 \\ (0.153)$	$0.159 \\ (0.154)$
FEMOPP×EDU	$-0.299^{**}$ (0.149)	$-0.316^{**}$ (0.153)	-0.269 (0.215)	-0.270 (0.223)	$-0.368^{*}$ (0.210)	$-0.392^{*}$ (0.215)
KNOWNOPP×EDU	0.088 (0.154)	$0.038 \\ (0.159)$	-0.290 (0.216)	-0.302 (0.221)	$0.487^{**}$ (0.221)	$0.392^{*}$ (0.230)
AGE	$0.006^{**}$ (0.003)	$0.007^{***}$ (0.003)	$0.011^{***}$ (0.004)	$0.011^{***}$ (0.004)	0.001 (0.004)	0.003 (0.004)
LIVE						
Village	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Small town	$-0.218^{**}$ (0.096)	$-0.188^{*}$ (0.099)	$-0.241^{*}$ (0.142)	$-0.243^{*}$ (0.147)	-0.210 (0.131)	-0.144 (0.136)
Big city	-0.114 (0.096)	-0.075 (0.099)	-0.145 (0.142)	-0.144 (0.148)	-0.091 (0.131)	-0.012 (0.135)
ROLE						
Hawk Option B	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Hawk Option A	$0.455^{***}$ (0.062)	$0.472^{***}$ (0.064)	$0.404^{***}$ (0.089)	$0.407^{***}$ (0.092)	$0.534^{***}$ (0.088)	$0.561^{***}$ (0.091)
EXPECTATIONS						
EXPECT Dove		0.000 (.)		0.000 (.)		0.000 (.)
EXPECT Hawk		$-0.883^{***}$ (0.072)		$-0.909^{***}$ (0.105)		$-0.854^{***}$ (0.099)
Constant	$-0.260^{*}$ (0.142)	0.251 (0.153)	$-0.433^{**}$ (0.217)	$0.151 \\ (0.231)$	-0.106 (0.191)	0.321 (0.207)
R-squared	0.031	0.099	0.032	0.102	0.042	0.106
LR $\chi^2$ Observations	70.699 1678	215.941 1678	36.057 830	109.082 830	48.431 848	116.905 848

Table C.1: Probit estimates of the baseline model – Pooled sample

Notes: Full tables for the baseline model - Pooled sample. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, expectations about the opponent's strategy, and country fixed effects. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.
	(1)	(2)	(3)	(4)	(5)	(6)
	Chose Hawkish	Chose Hawkish	Chose Hawkish	Chose Hawkish	Chose Hawkish	Chose Hawkish
	All	All	Female	Female	Male	Male
EDU	0.128	0.197	0.202	0.260	0.050	0.123
	(0.172)	(0.177)	(0.252)	(0.259)	(0.240)	(0.247)
KNOWNOPP	-0.300*	-0.257	-0.225	-0.168	-0.374	-0.335
	(0.175)	(0.177)	(0.251)	(0.251)	(0.246)	(0.251)
FEMOPP	0.419**	0.435***	0.553**	0.579**	0.351	0.364
I LINOI I	(0.165)	(0.169)	(0.247)	(0.250)	(0.226)	(0.233)
FEMODDYFDU	0 519**	0 566***	0.670**	0.749**	0.415	0.459
FEMOLLXEDO	(0.312)	-0.500	-0.070	(0.217)	-0.415	-0.452
	(0.212)	(0.213)	(0.503)	(0.517)	(0.230)	(0.300)
KNOWNOPP×EDU	0.197	0.134	0.021	-0.013	0.382	0.286
	(0.221)	(0.228)	(0.310)	(0.323)	(0.312)	(0.323)
AGE	0.011**	0.011**	0.008	0.005	0.016**	0.018**
	(0.004)	(0.005)	(0.006)	(0.007)	(0.007)	(0.007)
LIVE						
Village	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)
Small town	-0.262	-0.158	-0.630*	-0.405	-0.051	-0.018
Sinan town	(0.195)	(0.207)	(0.342)	(0.360)	(0.243)	(0.260)
D: :/	0.050	0.120	0.464	0.041	0.100	0.140
Big city	-0.252	-0.139	-0.464	-0.241 (0.255)	-0.198	-0.140
DOLD	(0.100)	(0.200)	(0.337)	(0.333)	(0.231)	(0.248)
ROLE						
Hawk Option B	0.000	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)	(.)
Hawk Option A	$0.601^{***}$	$0.640^{***}$	$0.543^{***}$	$0.557^{***}$	$0.664^{***}$	$0.721^{***}$
	(0.087)	(0.090)	(0.125)	(0.129)	(0.123)	(0.128)
EXPECTATIONS						
EXPECT Dove		0.000		0.000		0.000
		(.)		(.)		(.)
EXPECT Hawk		-0.977***		-0.985***		-0.979***
LM LOT Hawk		(0.101)		(0.145)		(0.144)
Constant	0.241	0.215	0.000	0.400	0.552*	0.004
Constant	-0.341 (0.235)	(0.210)	(0.308)	0.499	-0.555	-0.004 (0.337)
	(0.200)	(0.200)	(0.000)	(0.401)	(0.500)	(0.331)
R-squared	0.054	0.134	0.054	0.136	0.066	0.143
LK $\chi^2$	62.494 876	144.839 876	29.540 497	73.517	39.851	79.766
O DOCI VALIONS	010	010	444	444	440	443

Table C.2: Probit estimates of the baseline model – India

Notes: Full tables for the baseline model - India. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, and expectations about the opponent's strategy. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	(1) Chose Hawkish All	(2) Chose Hawkish All	(3) Chose Hawkish Female	(4) Chose Hawkish Female	(5) Chose Hawkish Male	(6) Chose Hawkish Male
EDU	-0.177 (0.168)	-0.140 (0.171)	$0.175 \\ (0.229)$	0.124 (0.232)	$-0.597^{**}$ (0.255)	$-0.473^{*}$ (0.263)
KNOWNOPP	$0.192 \\ (0.149)$	0.251 (0.154)	$0.381^{*}$ (0.212)	$0.492^{**}$ (0.219)	$0.112 \\ (0.215)$	$0.112 \\ (0.219)$
FEMOPP	$0.002 \\ (0.149)$	-0.008 (0.154)	-0.035 (0.223)	-0.127 (0.233)	-0.076 (0.210)	-0.002 (0.210)
FEMOPP×EDU	-0.150 (0.215)	-0.138 (0.220)	0.164 (0.309)	0.204 (0.320)	-0.434 (0.308)	-0.436 (0.314)
KNOWNOPP×EDU	$0.121 \\ (0.224)$	$0.102 \\ (0.228)$	-0.500 (0.307)	-0.455 (0.310)	$0.863^{**}$ (0.336)	$0.753^{**}$ (0.347)
AGE	0.003 (0.003)	$0.005 \\ (0.003)$	$0.013^{***}$ (0.005)	$0.015^{***}$ (0.005)	-0.006 (0.005)	-0.003 (0.005)
LIVE						
Village	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Small town	$-0.201^{*}$ (0.113)	-0.190 (0.116)	-0.083 (0.164)	-0.105 (0.168)	$-0.342^{**}$ (0.163)	$-0.277^{*}$ (0.165)
Big city	-0.073 (0.115)	-0.047 (0.117)	-0.089 (0.165)	-0.117 (0.169)	-0.012 (0.167)	0.066 (0.170)
ROLE						
Hawk Option B	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Hawk Option A	$0.302^{***}$ (0.090)	$0.300^{***}$ (0.092)	$0.227^{*}$ (0.129)	0.211 (0.132)	$\begin{array}{c} 0.431^{***} \\ (0.130) \end{array}$	$\begin{array}{c} 0.431^{***} \\ (0.133) \end{array}$
EXPECTATIONS						
EXPECT Dove		0.000 (.)		0.000 (.)		0.000 (.)
EXPECT Hawk		$-0.800^{***}$ (0.103)		$-0.869^{***}$ (0.157)		$-0.708^{***}$ (0.141)
Constant	-0.278 (0.177)	0.164 (0.189)	$-0.750^{***}$ (0.265)	-0.187 (0.285)	0.137 (0.249)	$0.430 \\ (0.264)$
R-squared LR $\chi^2$ Observations	0.023 24.480 802	0.080 82.317 802	$0.027 \\ 15.071 \\ 403$	$0.087 \\ 43.742 \\ 403$	0.062 30.536 399	$0.107 \\ 49.307 \\ 399$

Table C.3: Probit estimates of the baseline model – Norway

Notes: Full tables for the baseline model - Norway. The outcome variable takes value one if the subject chose the hawkish option and zero otherwise. Robust standard errors in parentheses. Controls are: age, place of residence (village, small town, big city), whether the hawkish option was denoted as Option A or B, and expectations about the opponent's strategy. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

#### Conservative/liberal attitudes

Dep var: propensity to choose hawkish						
INDIA		Women			Men	
	beating	jobs	income	beating	jobs	income
	(1)	(2)	(3)	(4)	(5)	(6)
KNOWNOPP	-0.632	-0.372	-0.169	-0.082	-0.352	-0.038
	(0.553)	(0.460)	(0.405)	(0.581)	(0.480)	(0.467)
FEMOPP	-0.436	-0.154	0.055	-0.471	0.417	-0.274
	(0.463)	(0.413)	(0.387)	(0.518)	(0.441)	(0.439)
BEATING	-0.258**			-0.069		
	(0.104)			(0.098)		
KNOWNOPP×BEATING	0.095			-0.013		
	(0.124)			(0.132)		
FEMOPP×REATING	0.137			0.136		
	(0.106)			(0.120)		
IOPS	()	0.195		()	0.046	
1005		(0.085)			(0.040)	
UNOWNODD / IODC		0.049			0.059	
KNOWNOPP×JOBS		(0.042)			(0.052)	
		(0.107)			(0.110)	
FEMOPP×JOBS		0.069			-0.078	
		(0.097)			(0.106)	
INCOME			-0.056			-0.079
			(0.088)			(0.095)
KNOWNOPP×INCOME			-0.017			-0.033
			(0.114)			(0.125)
FEMOPP×INCOME			0.029			0.110
			(0.111)			(0.117)
Constant	1.445**	0.720	0.380	-0.332	-0.437	-0.308
	(0.614)	(0.533)	(0.507)	(0.514)	(0.483)	(0.459)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.061	0.049	0.046	0.062	0.062	0.064
LR $\chi^2$	34.437	28.279	25.793	39.364	39.223	39.457
Observations	427	427	427	449	449	449

Table C.4: Role of conservative/liberal gender attitudes – India

Notes: Probit estimates of propensity to play hawk conditional on conservative/liberal gender attitudes in India. Robust standard errors in parentheses. BEATING: Agreement with the statement 'It is fine for a husband to beat his wife if she behaves badly'. JOBS: Agreement with 'When jobs are scarce, men should have priority'. INCOME: Agreement with 'When a wife earns more than her husband, this causes problems within the household'. Answers range from 1 to 5, where 1 = strongly agree and 5 = strongly disagree. Controls are the same as in the baseline model (see Table 2). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Dep	var: prope	ensity to c	choose nav	VKISH		
NORWAY		Women			Men	
	beating	jobs	income	beating	jobs	income
	(1)	(2)	(3)	(4)	(5)	(6)
KNOWNOPP	3.251	1.265	-0.131	$2.327^{**}$	0.245	0.961
	(3.003)	(1.173)	(0.587)	(1.157)	(0.822)	(0.642)
FEMOPP	-1.728	-1.431	0.400	-0.707	-0.370	-0.774
	(2.889)	(1.260)	(0.621)	(1.349)	(0.989)	(0.660)
BEATING	-0.185			$0.303^{*}$		
	(0.283)			(0.181)		
KNOWNOPP×BEATING	-0.627			-0.385		
	(0.604)			(0.239)		
FEMOPP×BEATING	0.353			0.089		
	(0.581)			(0.276)		
JOBS		-0.108			-0.067	
		(0.189)			(0.133)	
KNOWNOPP×JOBS		-0.235			0.052	
		(0.244)			(0.182)	
FEMOPP×JOBS		0.308			0.020	
INCOME		(0.261)	0.049		(0.211)	0.104
INCOME			-0.043			(0.104)
LANONANODD BIGONE			(0.107)			(0.112)
KNOWNOPP×INCOME			0.070			-0.122
			(0.143)			(0.137)
FEMOPP×INCOME			-0.089			0.117
-			(0.151)			(0.150)
Constant	0.277	-0.110	-0.472	$-1.476^{*}$	0.271	-0.462
	(1.414)	(0.937)	(0.491)	(0.895)	(0.631)	(0.514)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.035	0.029	0.022	0.053	0.048	0.050
LK $\chi^2$	18.715	17.223	12.122	29.344 200	25.954 200	27.720
Observations	405	405	405	222	293	298

Table C.5: Role of conservative/liberal gender attitudes – Norway

Dep var: p	propensity to	choose	hawkish
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Notes: Probit estimates of propensity to play hawk conditional on conservative/liberal gender attitudes in Norway. Robust standard errors in parentheses. BEATING: Agreement with the statement 'It is fine for a husband to beat his wife if she behaves badly'. JOBS: Agreement with 'When jobs are scarce, men should have priority'. INCOME: Agreement with 'When a wife earns more than her husband, this causes problems within the household'. Answers range from 1 to 5, where 1 = strongly agree and 5 = stronglydisagree. Controls are the same as in the baseline model (see Table 2). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

## Subsample splits according to expectations

	IND	IA	INDI	A: F	INDL	A: M
Expect opp play:	Hawk	Dove	Hawk	Dove	Hawk	Dove
	(1)	(2)	(3)	(4)	(5)	(6)
EDU	$0.422^{**}$	-0.500	0.449	-0.232	0.389	-0.770
	(0.208)	(0.395)	(0.307)	(0.531)	(0.287)	(0.625)
KNOWNOPP	-0.210	-0.374	-0.244	0.116	-0.145	-0.984*
	(0.219)	(0.374)	(0.318)	(0.515)	(0.305)	(0.591)
FEMOPP	0.481**	0.313	0.688**	0.264	0.325	0.615
	(0.204)	(0.328)	(0.309)	(0.533)	(0.274)	(0.442)
KNOWNOPP×EDU	0.135	0.176	0.081	-0.350	0.180	0.822
	(0.271)	(0.472)	(0.392)	(0.644)	(0.378)	(0.725)
FEMOPP×EDU	-0.725***	-0.229	-0.913**	-0.264	-0.594*	-0.403
	(0.261)	(0.413)	(0.384)	(0.627)	(0.361)	(0.591)
Constant	-0.580*	-0.033	-0.397	0.352	-0.766**	-0.351
	(0.301)	(0.456)	(0.555)	(0.699)	(0.386)	(0.671)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.057	0.114	0.060	0.086	0.068	0.183
LR $\chi^2$	43.010	32.972	22.094	14.694	26.311	25.076
Observations	608	268	293	134	315	134

 Table C.6:
 Propensity to choose hawkish – Probit estimates conditional on expected opponent's choice

	NO	R	NOR	: F	NOF	R: M
Expect opp play:	Hawk	Dove	Hawk	Dove	Hawk	Dove
	(1)	(2)	(3)	(4)	(5)	(6)
EDU	-0.190	0.046	0.018	0.263	-0.402	-0.922*
-	(0.208)	(0.311)	(0.291)	(0.448)	(0.300)	(0.502)
KNOWNOPP	0.272	0.270	0.577**	0.172	-0.023	0.342
	(0.184)	(0.278)	(0.249)	(0.469)	(0.280)	(0.358)
FEMOPP	-0.004	-0.110	-0.008	-0.372	-0.041	0.095
	(0.182)	(0.283)	(0.260)	(0.479)	(0.266)	(0.365)
KNOWNOPP×EDU	0.076	0.149	-0.511	0.202	0.849**	0.863
	(0.273)	(0.433)	(0.371)	(0.699)	(0.412)	(0.615)
FEMOPP×EDU	-0.124	-0.115	0.296	-0.361	-0.640*	0.049
	(0.257)	(0.434)	(0.360)	(0.699)	(0.384)	(0.592)
Constant	-0.793***	$0.663^{*}$	-1.221***	0.378	-0.368	0.609
	(0.220)	(0.339)	(0.307)	(0.601)	(0.333)	(0.435)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.033	0.028	0.063	0.036	0.052	0.106
LR $\chi^2$	23.723	8.647	25.099	4.168	16.815	18.222
Observations	564	238	300	103	264	135

Notes: Participants' choices conditional on whether they expect their opponent to play hawk or dove (Probit estimates). Robust standard errors in parentheses. Controls are the same as in the baseline model (see Table 2). \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

## D Instructions, English version

Below we report the printout version of the experimental instructions. When it comes to the treatments where the gender of the other player is known, we only report the part of the instructions that varies between them (from screen 8 to 12). The translations are available upon request.

### D.1 Gender Unknown

Screen #1

Please choose your preferred language. कृपया अपनी पसंदीदा भाषा चुनें।

English

हिंदुी

Screen #2

## **Welcome**

Thank you for taking part in this study.

In this study, you will be presented with information relevant to human decision making and asked to answer some questions about it. Please be assured that your responses will be kept completely **confidential**.

In total, the study should take you less than **10 minutes** to complete.

On top of your participation fee, you can earn points **depending on** your choices and the choices of another participant in this study up to a maximum of 1000 points (1000 points = 220 ₹).

By clicking the Continue button below, you acknowledge that your participation in the study is **voluntary**, that you are **18 years of age or older**, and that you are aware that you may choose to **terminate your participation in the study at any time and for any reason**, but you will not be paid if you do not finish it. That is, if you do close your browser window or leave the study, you will not be able to re-enter and we will not be able to pay you for your participation.

#### Screen #3

# Please answer the following questions

#### Question 1

How old are you?

#### Question 2

What is your sex?

MaleFemale

#### Question 3

What is your nationality? If you have more than one, what is your primary nationality?

#### Question 4

What is the highest educational level you obtained?

O Primary School

O Secondary School

O University Degree and above

### Question 5

How religious would you consider yourself being?

O Not at all religious

O Moderately religious

O Very religious

## Question 6

Where do you live?

VillageSmall cityBig city

Screen #4.1

# **Instructions**

You are **Player 1** and, for the purpose of this study, you are going to be paired with another randomly drawn person, **Player 2**. Shortly, we will give you more information about the personal characteristics of Player 2. Player 2 will be given the same information about your personal characteristics.

You and Player 2 have the opportunity to **share 1500 points**, but both of you have to agree on how to split them. You must vote for one of two options, **Option A** or **Option B**. Player 2 is asked to make the same decision.

If you and Player 2 vote for **the same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

The two options are:

## **Option A**

Option B

If **Option A** wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If Option	B	wins,	earnings	are:
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Player 1: 500 points

Player 2: 1000 points

If you vote for Option A and Player 2 votes for Option B, you both earn **0 points.** 

If you vote for **Option B** and Player 2 votes for **Option A**, you both earn **0 points**.

Your vote and the vote of Player 2 will be matched after you have taken your decisions.

You must vote for Option A or Option B without knowing what Player 2 has voted for. Similarly, Player 2 must vote without knowing what you have voted for.

Screen #4.2

# **Instructions**

You are **Player 1** and, for the purpose of this study, you are going to be paired with another randomly drawn person, **Player 2**.
Shortly, we will give you more information about the personal characteristics of Player 2. Player 2 will be given the same information about your personal characteristics.

You and Player 2 have the opportunity to **share 1500 points**, but both of you have to agree on how to split them. You must vote for one of two options, **Option A** or **Option B**. Player 2 is asked to make the same decision.

If you and Player 2 vote for **the same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

The two options are:

**Option A** 

**Option B** 

If **Option A** wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If **Option B** wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If you vote for **Option A** and Player 2 votes for **Option B**, you both earn **0 points.** 

# If you vote for Option B and Player 2 votes for Option A, you both earn **0 points**.

Your vote and the vote of Player 2 will be matched after you have taken your decisions.

You must vote for Option A or Option B without knowing what Player 2 has voted for. Similarly, Player 2 must vote without knowing what you have voted for.

Screen #5

# <u>Quiz</u>

## You have a maximum of three attempts.

If you fail to answer correctly the questions below more than three times, you will be removed from this study.

Screen #5.1

You are Player 1.

If **Option A** wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If **Option B** wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

Remember, if you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Screen #5.2

## You are Player 1.

If **Option A** wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If **Option B** wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

Remember, if you and Player 2 vote for **different options**, no option wins and both you and player 2 earn **0 points**.

## Screen #5.1

1) How many points are you going to get if both you and Player 2 vote for Option

<mark>A</mark>?

2) How many points are you going to get if you vote for Option A and Player 2 votes for Option B?

3) How many points are you going to get if you vote for Option B and Player 2 votes for Option A?

4) How many points are you going to get if both you and Player 2 vote for Option

**B**?

Screen #5.2

1) How many points are you going to get if both you and Player 2 vote for Option

<mark>A</mark>?

2) How many points are you going to get if you vote for Option A and Player 2 votes for Option B?

3) How many points are you going to get if you vote for Option B and Player 2 votes for Option A?

4) How many points are you going to get if both you and Player 2 vote for Option

<mark>B</mark>?

Remaining attempts to answer questions: \${e://Field/mistake}

Screen #6.1

# You made at least one mistake.

Press Continue to try again.

Screen #7.1

You failed to provide the correct answer 3 times.

You will now be removed from the study.

Screen #6.2

# You made at least one mistake.

Press Continue to try again.

Screen #7.2

You failed to provide the correct answer **3 times**.

You will now be removed from the study.

Screen #8

# We will now randomly draw the person that will be matched with you.

Player 2 is equally likely to be a man or a woman.

(Please wait for the information to appear below)

Player 2 is a man/woman from India (from a Hindi speaking state) who has been informed that you are a man/woman from India (from a Hindi speaking state)

Screen #9.1

# **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for him/herself and 1000 points for me)
 Option B (1000 points for him/herself and 500 points for me)

Screen #9.2

# **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

O Option A (1000 points for him/herself and 500 points for me)

O Option B (500 points for him/herself and 1000 points for me)

Screen #10

# Click the Continue button if you are ready to make your choice.

Screen #11.1

# **Voting decision**

You are Player 1. Player 2 is a man/woman from India who has been informed that you are a man/woman from India.

You and Player 2 have the opportunity to share **1500 points**.

## Option A

If **Option A** wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

Option B

If **Option B** wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

## Which option do you vote for?

# Option A



Screen #11.2

# **Voting decision**

You are Player 1. Player 2 is a man/woman from India who has been informed that you are a man/woman from India.

You and Player 2 have the opportunity to share **1500 points**.

**Option A** 

If **Option A** wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

**Option B** 

If **Option B** wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

Option A

Option B

Screen #12.1

# **Bonus Payment**

You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

O Option A (500 points for him/herself and 1000 points for me)

O Option B (1000 points for him/herself and 500 points for me)

Screen #12.2

# **Bonus Payment**

You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (1000 points for him/herself and 500 points for me)
 Option B (500 points for him/herself and 1000 points for me)

## Screen #13

# In the next pages, you will be asked some **questions related to** your choice and the study in general.

You do not earn any additional points in answering these questions. However, in order to finish you need to provide an answer.

Screen #14

1) You were asked to vote for Option A or Option B. Please write in the box below why you decided to vote for Option A.

## Screen #15

1) You were asked to vote for Option A or Option B. Please write in the box below why you decided to vote for Option B.

Screen #16

2) What do you think this study was about?

O Selfishness

O Competitiveness

O Gender

O None of the above

Screen #17

3) What do you think was the sex of Player 2?

WomanMan

4) Take a moment to try and remember, what was the country of Player 2?

Ο	Nepal
Ο	India
Ο	Pakistan
Ο	None of the above

Screen #19

5) What is **YOUR opinion** about the statements below?

5.1) "When a firm makes hiring decisions they should hire men first. Women should only be hired if there are no men available".



5.2) "If the wife earns more money than her husband, it's almost certain to cause problems within the household".



5.3) "In some cases, it is right for a man to beat his wife if she behaves badly".



#### Screen #20

# 6) Was the study clear? If not, what did you struggle to understand?

Screen #21

# Study completed

This is the end of this study.

After this study has expired, we will randomly select one other person who matches the drawn characteristics and compare his/her decision with yours. If his/her choice matches yours, you will receive the amount you both agreed upon.

In addition to that, you will also **receive the equivalent of 20 points** if you correctly guessed your partner's choice.

Please note that it might take between **4 to 6 weeks for the** additional points payment to reach your account. Thank you for your participation. Please click the Continue button.

## D.2 Gender Known, female-female matches

#### Screen #8

We will now randomly draw the person that will be matched with you. Player 2 is equally likely to be a man or a woman.

(Please wait for the information to appear below)

Player 2 is a woman from India (from a Hindi speaking state) who has been informed that you are a woman from India (from a Hindi speaking state).

Screen #9.1

## Bonus Payment

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for herself and 1000 points for me) Option B (1000 points for herself and 500 points for me) Screen #9.2

## **Bonus Payment**

# You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

O Option A (1000 points for herself and 500 points for me)

O Option B (500 points for herself and 1000 points for me)

Screen #10

Click the Continue button if you are ready to make your choice.

Screen #11.1

# **Voting** decision

You are Player 1. Player 2 is a woman from India who has been informed that you are a woman from India.

You and Player 2 have the opportunity to share **1500 points**.

#### **Option A**

If Option A wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

**Option B** 

If Option B wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

Option B

## Screen #11.2

## **Voting** decision

You are Player 1. Player 2 is a woman from India who has been informed that you are a woman from India.

You and Player 2 have the opportunity to share **1500 points**.

## **Option A**

If Option A wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

**Option B** 

If Option B wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

Option B

#### Screen #12.1

## **Bonus Payment**

# You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for herself and 1000 points for me)
 Option B (1000 points for herself and 500 points for me)

Screen #12.2

## Bonus Payment

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

Option A (1000 points for herself and 500 points for me) Option B (500 points for herself and 1000 points for me)

## D.3 Gender Known - male-female matches

#### Screen #8

#### We will now randomly draw the person that will be matched with you.

Player 2 is equally likely to be a man or a woman.

(Please wait for the information to appear below)

Player 2 is a man from India (from a Hindi speaking state) who has been informed that you are a woman from India (from a Hindi speaking state).

Screen #9.1

## **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

O Option A (500 points for himself and 1000 points for	or me)
O Option B (1000 points for himself and 500 points for	r me)

Screen #9.2

# **Bonus Payment**

# You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (1000 points for himself and 500 points for me) Option B (500 points for himself and 1000 points for me)

Screen #10

Click the Continue button if you are ready to make your choice.

#### Screen #11.1

## **Voting decision**

You are Player 1. Player 2 is a man from India who has been informed that you are a woman from India.

You and Player 2 have the opportunity to share **1500 points**.

### **Option A**

If Option A wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

**Option B** 

If Option B wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

Option B

# Voting decision

You are Player 1. Player 2 is a man from India who has been informed that you are a woman from India.

You and Player 2 have the opportunity to share **1500 points**.

## **Option A**

If Option A wins, earnings are:

Player 1: 500 points

Screen #11.2

Player 2: 1000 points

**Option B** 

If Option B wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

Option B
#### Screen #12.1

## **Bonus Payment**

## You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for himself and 1000 points for me) Option B (1000 points for himself and 500 points for me)

#### Screen #12.2

## **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

$\bigcirc$ Option A (1000 points for himself and 500 points for	me)
O Option B (500 points for himself and 1000 points for	me)

#### D.4 Gender Known, male-male matches

#### Screen #8

#### We will now randomly draw the person that will be matched with you.

Player 2 is equally likely to be a man or a woman.

(Please wait for the information to appear below)

## Player 2 is a man from India (from a Hindi speaking state) who has been informed that you are a man from India (from a Hindi speaking state).

Screen #9.1

## **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for himself and 1000 points for me) Option B (1000 points for himself and 500 points for me) Screen #9.2

## **Bonus Payment**

# You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

O Option A (1000 points for himself and 500 points for me)

Option B (500 points for himself and 1000 points for me)

Screen #10

Click the Continue button if you are ready to make your choice.

#### Screen #11.1

## **Voting decision**

You are Player 1. Player 2 is a man from India who has been informed that you are a man from India.

You and Player 2 have the opportunity to share **1500 points**.

#### **Option A**

If Option A wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

**Option B** 

If Option B wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

## Screen #11.2 Voting decision

You are Player 1. Player 2 is a man from India who has been informed that you are a man from India.

You and Player 2 have the opportunity to share **1500 points**.

#### **Option A**

If Option A wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

**Option B** 

If Option B wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

Screen #12.1

## **Bonus Payment**

You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for himself and 1000 points for me) Option B (1000 points for himself and 500 points for me)

Screen #12.2

## Bonus Payment

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

Option A (1000 points for himself and 500 points for me) Option B (500 points for himself and 1000 points for me)

#### D.5 Gender Known, male-female matches

#### Screen #8

#### We will now randomly draw the person that will be matched with you.

Player 2 is equally likely to be a man or a woman.

(Please wait for the information to appear below)

Player 2 is a woman from India (from a Hindi speaking state) who has been informed that you are a man from India (from a Hindi speaking state).

Screen #9.1

## **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

O Option A (500 points for herself and 1000 points for	me)
O Option B (1000 points for herself and 500 points for	me)

Screen #9.2

## **Bonus Payment**

You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (1000 points for herself and 500 points for me) Option B (500 points for herself and 1000 points for me)

Screen #10

Click the Continue button if you are ready to make your choice.

#### Screen #11.1

## **Voting** decision

You are Player 1. Player 2 is a woman from India who has been informed that you are a man from India.

You and Player 2 have the opportunity to share **1500 points**.

#### **Option A**

If Option A wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

**Option B** 

If Option B wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

## Screen #11.2 Voting decision

You are Player 1. Player 2 is a woman from India who has been informed that you are a man from India.

You and Player 2 have the opportunity to share **1500 points**.

#### **Option A**

If Option A wins, earnings are:

Player 1: 500 points

Player 2: 1000 points

**Option B** 

If Option B wins, earnings are:

Player 1: 1000 points

Player 2: 500 points

If you and Player 2 vote for the **same option**, that option wins and is **implemented**.

If you and Player 2 vote for **different options**, no option wins and both you and Player 2 earn **0 points**.

Which option do you vote for?

**Option A** 

#### Screen #12.1

## **Bonus Payment**

## You have the chance to earn additional money. **If your answer to the question below is correct**, you will be paid an extra **20 points on top of your final payoff**.

Please give your best guess, which option is Player 2 going to vote for?

Option A (500 points for herself and 1000 points for me) Option B (1000 points for herself and 500 points for me)

#### Screen #12.2

## **Bonus Payment**

You have the chance to earn additional money. If your answer to the question below is correct, you will be paid an extra 20 points on top of your final payoff.

Please give your best guess, which option is Player 2 going to vote for?

$\bigcirc$ Option A (1000 points for herself and 500 points for	me)
O Option B (500 points for herself and 1000 points for	me)