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ABSTRACT

We set up an experiment with pre-play communication to study the impact of promise elicitation by trustors from trustees on trust and trustworthiness. When given the opportunity a majority of trustors solicits a promise from the trustee. This drives up the promise making rate by trustees to almost 100%. We find that elicited promises are more likely to be trusted than volunteered promises, but trustees who make an elicited promise are not more likely to be trustworthy than trustees who make a voluntary promise.

1. Introduction

Pre-play messages by trustees are often found to increase trust and trustworthiness in experimental games. This effect is often attributed to promises. Trustors who receive a promise are more trusting and trustees who make a promise are more trustworthy.[1] Previous studies argue that only voluntary promises are effective in enhancing trust and trustworthiness (Belot et al., 2010; Charness and Dufwenberg, 2010). Promises elicited by a third party are not as effective as promises volunteered by trustees in enhancing cooperation.

Belot et al. (2010) suggest that the moral cost of breaking a promise is lower when one is 'forced' to make a promise. Charness and Dufwenberg (2010) provide an explanation based on guilt aversion. They suggest that, unlike volunteered

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[1] See, e.g., Bicchieri and Lev-On (2007), Charness and Dufwenberg (2006), Ismayilov and Potters (2016), Orbell et al. (1988), Ostrom et al. (1992), Sally (1995) and Vanberg (2008).

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promises, elicited promises do not affect expectations by trustors and trustees (i.e., these promises are not believed and are not expected to be believed), and, hence, do not affect trustees' feeling of guilt when breaking a promise.

One important feature of these studies is that promises are elicited by a third party and not by the trustor. It is not clear whether a promise elicited by the trustor from the trustee would be as ineffective as the promise elicited by a third party. In particular, unlike third-party elicitation, promise elicitation by the trustor might reveal to the trustee something about the trustor's intentions and expectations, e.g., whether the trustor is willing to trust if he is assured by a promise made by the trustee. Expectations might be affected differently after a promise elicited by the trustor than a promise elicited by a third party.

If the trustor asks for a promise, it might suggest to the trustee that the trustor is willing to rely on a promise made by the trustee. 'Otherwise, why would the trustor ask for a promise?' the trustee might think. A book on influence (Yeung, 2011) recommends to ask for a promise from one's contracting partner: "If you would like a customer to call you . . .ask 'Will you call me back next week?' and get the customer to say 'yes'. If you're nearing the end of a first date, don't say 'It would be great to meet again.' Ask: 'Will you go out with me again?' And don't take no for answer. Use your charm and good humor to get a 'yes'".

Our goal in this paper is to test whether trustors elicit a promise from trustees when given the opportunity to do so and how the behavior of trustors and trustees is affected by elicited promises compared to volunteered promises. We implement two treatments of a trust game: one in which only the trustee can send a free-form pre-play message, and one in which, first, the trustor sends a free-form message to the trustee and then, the trustee responds. To examine whether elicited and voluntary promises affect expectations differently, we measure first-order beliefs of trustors and second-order beliefs of trustees regarding the outcome of the trust game.

We find that 73% of the trustors elicit a promise from the trustee either by directly asking the trustee to make a promise or by asking the trustee to cooperate. Almost all trustees (95%) make a promise in return. The analysis of beliefs data shows that trustors are more optimistic about the cooperative outcome when they elicit a promise than when they receive a voluntereed promise or no promise and this is correctly anticipated by trustees.

The analysis of choice data shows that although more promises are made and trustees' second-order beliefs are higher with promise elicitation than with one way communication, trustees are no more likely to cooperate in the former case than in the latter case. Nevertheless, overall our results suggest that asking for a promise when given the opportunity is better than nor asking for it. This result is driven by the fact that trustees who do not make a promise if not asked to are very unlikely to be trustworthy.

2. Experimental design and hypothesis

Our experimental design is based on the trust game from Charness and Dufwenberg (2006). The game is depicted in Fig. 1. In this game, first, A decides either to play *Out* or *In*. If A plays *Out*, then A and B get 5 euros each and the game ends. If A plays *In*, then B's choice determines the payoffs. If B chooses *Don't Roll*, B gets 14 euros and A gets 0. If B chooses *Roll*, B gets 10 euros and rolls a six sided die to determine the payoff to A. If the die comes up 1, then A gets 0 and if the die comes up any other number then A gets 12 euros.

We have two treatments: *Two-way messages* and *One-way message*. Our main treatment is the *Two-way messages* treatment. In this treatment first Player A sends a message to Player B and after player B receives the message from A she replies to player A. In the *One-way message* treatment only Player B sends a free-form message to Player A. It is similar to one of the treatments from Charness and Dufwenberg (2006) and serves as a control treatment.

As mentioned in the previous section the main feature of our design is that we let the trustor decide whether he wants to elicit a promise from the trustee or not. In contrast, promises are elicited by the experimenter in Charness and Dufwenberg (2010) and by the host of a TV show in Belot et al. (2010). Specifically, Charness and Dufwenberg (2010) give the trustee a choice between sending a predetermined 'I promise to choose *Roll*' message and sending a blank sheet of paper. Belot et al. (2010) analyze a dutch TV show where at the last stage of the show two participants make short speeches before playing a prisoner's dilemma. Some participants make voluntary promises during their speech, in other cases the host of the show elicits a promise from participants who do not volunteer to make a promise.

We are interested in the following questions:

- Do people elicit a promise from their partner if they have the opportunity to do so?
- How is the rate of promises by B players affected by whether or not A players solicit a promise?
- How does promise elicitation/non elicitation affect trustworthiness and promise keeping rates by B's?

2.1. Hypothesis

We do not present a complete equilibrium analysis but focus on the behavior of the B player - in much the same vein as Charness and Dufwenberg (2006) - and then analyze how B's behavior may be affected by the elicitation of a promise.

Let $\alpha(m)$ be B's first order belief that A plays *In* if A receives message m, where m can be either a promise (p) or not a promise (np). We assume that $\alpha(p) > \alpha(np)$, that is, B expects that a promise will increase the likelihood that A plays *In*. Apart

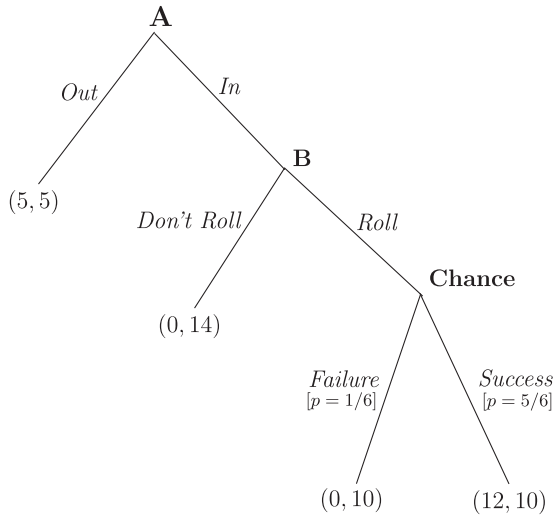

Fig. 1. Trust game of Charness and Dufwenberg (2006).

from the monetary payoffs, as displayed in Fig. 1, B may also experience a disutility due to feelings of guilt. The disutility is proportional to the degree to which B believes she lets down A. Let $\tau(m)$ be B's second order belief, that is, B's belief about A's belief that B will play *Roll* after message m. In case B makes a promise to *Roll* but decides to play *Don't Roll* A will receive a payoff of 0, while B believes that A expects a payoff of $\tau(p) \cdot 10$. B then experiences disutility $\gamma(\tau(p) \cdot 10 - 0)$ where γ is B's sensitivity to guilt. In case B does not make a promise and decides to play *Don't Roll*, B will experience disutility $\gamma(\tau(np) \cdot 10 - 0)$. It is reasonable to assume that $\tau(p) > \tau(np)$, that is B thinks that A is more optimistic that B will *Roll* after a promise than no promise.

B has to consider whether to make a promise ($m = p$) or not to make a promise ($m = np$), and whether to play *Roll* or *Don't Roll*. We will denote the latter decision by R and DR, respectively. B's expected utility for each of her four possibile strategies then is as follows:

$u(p, R) = \alpha(p) \cdot 10 + (1 - \alpha(p)) \cdot 5 = 5 + 5\alpha(p)$,
$u(p, DR) = \alpha(p) \cdot (14 - \gamma \cdot \tau(p) \cdot 10) + (1 - \alpha(p)) \cdot 5 = 5 + (9 - \gamma \cdot \tau(p) \cdot 10)\alpha(p)$,
$u(np, R) = \alpha(np) \cdot 10 + (1 - \alpha(np)) \cdot 5 = 5 + 5\alpha(np)$,
$u(np, DR) = \alpha(np) \cdot (14 - \gamma \cdot \tau(np) \cdot 10) + (1 - \alpha(np)) \cdot 5 = 5 + (9 - \gamma \cdot \tau(np) \cdot 10)\alpha(np)$.

First, since $\alpha(p) > \alpha(np)$, we have $u(p, R) > u(np, R)$. B will always make a promise when she plays *Roll*. Second, we have $u(p, R) > u(p, DR)$ if $\gamma \cdot \tau(p) \cdot 10 > 4$, indicating that conditional on making a promise B is more likely to *Roll* the more sensitive she is to guilt (γ) and the more optimistic she expects A to be after a promise ($\tau(p)$). Finally, B will decide to make a promise if $u(np, DR) < max\{u(p, R), u(p, DR)\}$. Straightforward calculations show that this boils down to $\alpha(p)/\alpha(np) > min\{(9 - 10\gamma\tau(np))/5, (9 - 10\gamma\tau(np))/(9 - 10\gamma\tau(p))\}$. This inequality is more likely to hold if B believes that a promise has a big effect on the likelihood that A will play *In* (that is, $\alpha(p)/\alpha(np)$ is large), and - in case she does not plan to *Roll* after a promise - if she suffers less disutility from guilt.

We now derive our main hypothesis regarding the effect of promise elicitation on promise-making and *Roll* rates. It is based on the assumption that promise elicitation mainly affects B's beliefs. If A solicits a promise this signals to B that A takes promises into account when making a decision. The ratio of B's first-order beliefs $\alpha(p)/\alpha(np)$ increases (because B thinks that if A asks for a promise he is willing to act on it), as does the ratio of B's second-order beliefs $\tau(p)/\tau(np)$. While the increase in $\tau(p)$ makes it less likely that the condition $\alpha(p)/\alpha(np) > min\{(9 - 10\gamma\tau(np))/5, (9 - 10\gamma\tau(np))/(9 - 10\gamma\tau(p))\}$ holds, the increase in $\alpha(p)/\alpha(np)$ makes it more likely that the condition holds. In addition, as $\tau(p)$ increases the condition $\gamma \cdot \tau(p) \cdot 10 > 4$ is more likely to hold, hence Bs are more likely to *Roll* conditional on making a promise. Since with elicitation we expect higher promise-making (due to increase in $\alpha(p)/\alpha(np)$) and promise-keeping rates (due to increase in $\tau(p)$), as a consequence the *Roll* rate will be higher.

- *Hypothesis* (*Promise solicitation affects B's beliefs*) Both the rate of promise-making and the *Roll* rate will be higher in case A solicits a promise from B compared to the case A cannot solicit a promise (one-way communication) or does not solicit a promise (two-way communication).

It has been suggested in the literature that involuntary promises might not affect behavior the same way voluntary promises do. For example, Belot et al. (2010) state that "...people do not want to volunteer lies but may have no compunction in lying if they feel compelled to do so". In our model, one way to capture this idea could be to assume that promise solicitation reduces the guilt that B experiences when breaking a promise. The argument is that B will feel more or less forced to issue a

promise at A's request. The promise is not entirely voluntary and B feels less responsible for the fact that it may affect A's beliefs. As Bicchieri (2006, p. 25) puts it: "Guilt presupposes the violation of expectations we consider legitimate". Hence, 'forcing' B to make a promise might reduce B's guilt sensitivity.

This idea of moral crowding out is related to a more general literature on the hidden costs of control (see, for example, Falk and Kosfeld, 2006). Various papers propose theoretical models to explain the hidden costs of control. In particular, Sliwka (2007) presents a principal-agent model where some agents (called 'conformists') want to act like the majority of people do, but are uncertain about the probability distribution of different types of people in the population. In Sliwka's model the principal's actions can signal to the agent what the principal thinks about the distribution of types in the population. In line with Sliwka (2007), we can assume that there are some B's who are always trustworthy, some B's who are always untrustworthy and some B's who are 'conformists' (they want to be like the majority). Then, 'forcing' B to make a promise might signal to a 'conformist' B that the majority of people are untrustworthy. As a result, 'conformists' may choose to play *Don't Roll* because they think that the majority of people are untrusworthy (i.e., will play *Don't Roll*). Not asking for a promise or, on the other hand, could be perceived as a signal that the majority of B's are trustworthy.[2] Hence, sound reasons may be given for why our main hypothesis might fail and the *Roll* rate may actually be lower in case A solicits a promise from B compared to the case A cannot solicit a promise (one-way communication) or does not solicit a promise (two-way communication).

3. Experimental procedure

The experiment was run at the CREED lab, University of Amsterdam. We ran 9 sessions with 84 pairs in the *Two-way messages* treatment and 3 sessions with 31 pairs in the *One-way message*treatment. Subjects earned around 15 euros on average (including a 5 euro show-up fee). Each session lasted for about one hour. The *One-Way message* treatment sessions were approximately ten minutes shorter than the *Two-way messages* treatment sessions.

Upon arrival, participants were seated behind visually partitioned workstations. Each subject was provided with instructions. Instructions were read aloud and questions were answered privately. Half of the subjects were assigned the role of A and the other half were assigned the role of B. To write their message subjects were provided with message sheets. Each message sheet had an identification number on top of it so that the experimenter could identify where the messages should be delivered.

In the *Two-way messages* sessions, first, message sheets were distributed to A's and A's were given enough time to write a message to the B. After A's finished writing messages, the experimenter collected the message sheets and distributed them to respective B's. Together with the message sheet from A, B's received an empty message sheet where they could reply to A's message. After B's finished writing their messages, the experimenter collected the message sheets and distributed them to respective A's. In the *One-way message* sessions message sheets were distributed to B's only. After all B's finished writing their messages, the experimenter collected all the message sheets. Then, each message sheet was distributed to respective A.

After the pre-play message stage, each pair played the game depicted in Fig. 1. This part of the experiment was computerized using the Z-tree software (Fischbacher, 2007). When playing this game, B players chose to *Roll* or *Don't Roll* before knowing A's choice (as in Charness and Dufwenberg, 2006). After B's made a choice, the experimenter approached each B to roll a die. All B's rolled a die to preserve anonymity. In case B chose *Roll*, the outcome of the die roll determined A's earnings (€0 or €12).

To analyze how the content of messages changes beliefs, we measured first-order beliefs of A's and second-order beliefs of B's about the cooperative outcome. After a choice to play *In* or *Out* was made, A's were asked to guess their payoff of playing *In* by choosing one of the five columns shown in Table 1. In case if they chose *In* this referred to their actual payoff; in case they chose *Out* this referred to the counterfactual payoff of choosing *In*. Under risk neutrality the columns correspond, from left to right, to intervals with midpoints at probabilities 12.5%, 32.5%, 50%, 67.5%, and 87.5% of receiving €12 as payoff.[3,4,5]

To measure second-order beliefs of B's, B's were shown Table 1 and asked to guess which column was chosen by A in her pair.

[2] Ellingsen and Johannesson (2008) propose a principal-agent model where in addition to material payoffs people derive utility from what others think about them. The model suggests that control might backfire because the agent might think that a 'controlling' principal is not worth impressing. In our setup, if 'forcing' B to make a promise is considered as an attempt to control B, then B might be untrustworthy because she will consider A not worth impressing.

[3] Let p denote the trustor's belief that he will receive €12 as the final payoff for the game. Assuming risk-neutrality and that the trustor is an expected utility maximizer, the trustor will choose column (5) over column (4) (also over all other columns) if $1.3p + 0.4(1-p) > 1.2p + 0.7(1-p)$, that is, if $p > 0.75$. Similarly, the fourth column will be chosen if $0.60 < p < 0.75$, the third column will be chosen if $0.40 < p < 0.60$ and so on. To convert column choices to beliefs we took the midpoints of intervals, i.e., 87.5% for the fifth column, 67.5% for the fourth column, 50% for the third column, 37.5% for the second column, and 12.5% for the first column.

[4] We asked A's to guess the outcome of the game rather than the choice made by B player. This ensures that if A gets a payoff of €0, he is not able to infer from the payment for guessing whether B chose *Don't Roll* or B chose *Roll* but the die roll was a failure.

[5] Our belief elicitation method is different than the one used by Charness and Dufwenberg (2006), but similar to the belief elicitation method of Vanberg (2008). Charness and Dufwenberg (2006) ask A players to guess the proportion of B players who chose to *Roll* among all B players. We think this could be problematic in our treatments with communication because players' beliefs depend largely on the content of the communication in their pair. So, we chose to elicit A's beliefs regarding the actions of the paired B, not all B's.

Table 1
Belief elicitation.

	(1)	(2)	(3)	(4)	(5)
Your guess	Almost certainly €0	Probably €0	Not sure	Probably €12	Almost certainly €12
Your bonus if you (would) receive €0	€1.30	€1.20	€1.00	€0.70	€0.40
Your bonus if you (would) receive €12	€0.40	€0.70	€1.00	€1.20	€1.30

4. Results

We first compare the two treatments to study how allowing the A player to send a message to the B player before B sends her message changes behavior and beliefs relative to the treatment in which A cannot write to B before B sends a message. We, then, analyze the content of the messages and how choices and beliefs depend on this content.

4.1. One-way message vs. two-way messages

Table 2 reports *In* rates by A's, *Roll* rates by B's and *In*&*Roll* rates for both treatments. The *In* rate by A's and the proportion of *In*&*Roll* combinations are 10%-points higher in the *Two-way messages* treatment than in the *One-way message* treatment. The differences are not significant though (for *In* rates $Z = 1.03$, $p = 0.30$, test of proportions, two-tailed, and for *In*&*Roll* combinations $Z = 1.02$, $p = 0.31$, test of proportions, two-tailed). On the other hand, the *Roll* rate is slightly and insignificantly lower in the *Two-way messages* treatment than in the *One-way message* treatment (44% vs. 50%) ($Z = -0.56$, $p = 0.57$, test of proportions, two-tailed).[6,7]

Table 3 compares average first-order beliefs of A's and average second-order beliefs of B's in the *One-way message* treatment to respective average beliefs in the *Two-way messages* treatment. A's are significantly more optimistic about receiving €12 in the *Two-way messages* treatment. B's correctly guessed that A's were more optimistic in the *Two-way messages* treatment than in the *One-way message* treatment.

4.2. Promise elicitation and promise making

As in a number of recent papers (e.g., Bigoni et al., 2014; Brandts et al., 2014;Cooper and Kuhn, 2014) we used the following procedure to code the content of the messages. First, a limited set of message categories was defined based on a cursory scan of messages by the authors. Then, three research assistants were recruited to code all the messages into one of these categories. Initially, we planned to classify A messages into two categories: messages in which A's solicit a promise by asking B to make a promise to *Roll* (e.g., 'I will choose *In* if you can promise to choose '*Roll*'?') and messages in which A's do not ask B to make a promise (e.g., blank messages or messages like 'The weather is nice today'). However, a preliminary analysis of messages revealed to us that some A's sent messages such as 'Please choose Roll', 'You should *Roll*' and 'I will choose In if you choose Roll'. We decided to create a separate category for these messages to check whether they have the same effect as the messages in which A explicitly asks for a promise. To summarize, we classify A messages in the *Two-way messages* treatment into three categories: (i) messages in which A solicits a promise to *Roll* from B by asking about B's intended play or whether or not B is willing to play *Roll*; category AP (Ask for Promise) in what follows, (ii) messages in which A asks, solicits, or encourages B to *Roll*; category AR (Ask to Roll) in what follows, and (iii) messages in which no promise is elicited or request is made; category NA (No Ask) in what follows.

As mentioned above we recruited three coders (two graduate students and one undergradute student) to code the messages. They were asked to code each A message into one of the three categories as described in the previous paragraph and each B message into one of two categories: a *promise* or *no promise*. Coder instructions are provided in Appendix C.[8] In total there were 84 A messages and 114 B messages (84 in the *Two-way messages* treatment and 30 in the *One-way message* treatment).

For the analysis we classify each message into one of the categories based on the majority decision by coders. The list of all the messages and the majority decision for each message are available in Appendix D. There was a majority decision for

[6] If *In* and *Roll* decisions were independent the expected rates of *In*&*Roll* combinations would be 70% × 44% = 28.3% in the *Two-way messages* treatment and 60% × 50% = 30% the *One-way message* treatment. The actual rates of *In*&*Roll* combinations are 33% and 23%, respectively. While subjects seem somewhat better coordinated on *In*&*Roll* combination in the *Two-way messages* treatment, the actual rates are not significantly different from expected rates in either treatment.

[7] For A *In* rates the power analysis yields a power of 0.86 for a two-tailed test with $\alpha = 0.10$ and a hypothesized effect of size 0.25 (0.85 in the *Two-way messages* treatment vs. 0.60 in *One-way message* treatment). For the observed empirical *In* rates to be significantly different we would need approximately at least 228 observations in total (assuming equal sample sizes for both treatments). For B *Roll* rates the power analysis yields a power of 0.80 for a two-tailed test with $\alpha = 0.10$ and a hypothesized effect of size 0.25 (0.75 in the *Two-way messages* treatment vs. 0.50 in *One-way message* treatment). For the observed empirical *Roll* rates to be significantly different we would need approximately 758 observations in total (assuming equal sample sizes for both treatments).

[8] The research assistants were not told any hypotheses that we had about the data, nor were they asked to make any determination about why particular messages were sent or what the effect of these messages might have been.

Table 2
Choices.[a]

	Treatment		
	Two-way messages	*One-way message*	*Z* stat
A's *In* rate	59/84	18/30	1.03
	(70%)	(60%)	(0.30)
B's *Roll* rate	37/84	15/30	−0.56
	(44%)	(50%)	(0.57)
In & *Roll* combinations	28/84	7/30	1.02
	(33%)	(23%)	(0.31)

[a] The *Z* stat reflects the two sample test of proportions for the two populations. *p*-values for two-tailed tests are reported in parentheses in column *Z* stat. *, **, and *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively for two-tailed test.

Table 3
Beliefs.[a]

	Treatment		
	Two-way messages	*One-way message*	*Z* stat
A's average first-order belief	58.07	48.58	1.72**
	(25.74)	(25.65)	(0.04)
B's average second-order belief	61.04	52.83	1.78**
	(23.00)	(22.60)	(0.04)

[a] The *Z* stat reflects Wilcoxon rank sum test for the two populations. p-values for one-tailed test are reported in parentheses in column *Z* stat. *, ** and *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively for one-tailed test. Standard errors are reported in parentheses.

each A message except one message that was coded differently by each coder (AP, AR, NA). The inter-rater agreement Kappa for A messages is 0.63. Below when we analyze the content of B's messages and beliefs and choices by A and B players, we see that the categories AP and AR are very similar. In fact the difference between these two categories is subtle and if we merge these two categories together into one the inter-rater agreement Kappa is 0.83. Overall, there are 34 (41%) messages in AP category (e.g., messages like 'Can I be sure you choose Roll?', 'Will you choose Roll when I play In?', 'What are you going to do? Roll or Don't Roll?'), 26 (31%) messages in AR category (e.g., 'Please choose Roll', 'Please Roll', 'You should choose Roll'), 23 (27%) messages in NA category (mostly blank messages or 'Hello', 'Enjoy the experiment', 'I choose Out', etc.), and as mentioned above no majority decision for one A message.

For B's messages, there were 72 (86%) messages coded as promise (e.g., 'I will Roll') and 12 (14%) as no promise (blank messages or messages like 'Have fun:', 'Good luck') in the *Two-way messages* treatment. The inter-rater agreement Kappa for B messages in the *Two-way messages* treatment is 0.43. In the *One-way message* treatment 21 (70%) B's made a promise and 9 (30%) did not. The inter-rater agreement Kappa is 0.89. For all 114 B messages the inter-rater agreement Kappa is 0.59.[9,10]

The column *Promise rate* in Table 4 reports the proportion of B's who made a promise in the *One-way message* treatment and in the *Two-way messages* treatment depending on the content of the A message. Overall, the promise making rate is higher in the *Two-way messages* treatment than in the *One-way message* treatment (86% vs. 70%, Z stat = 1.91, $p < 0.03$, one-tailed test). Note that promise making rates are similar when A asks B to make a promise (AP category) and when A asks B to *Roll* (AR category) (94% vs. 96%). Asking for a promise and asking to *Roll* were equally effective in eliciting promises from B players. Below we show that choices and beliefs are also similar for both of these categories. In view of this we also report results for these two categories combined together.

[9] We analyzed whether promises that were coded as a promise by all three coders are different from promises that were coded as a promise by only two of the three coders. In the *One-way message* treatment 21 out of 30 messages were unanimously coded as promise. There was no message coded as promise by a majority only. In the *Two-way messages* treatment 45 messages out of 84 were unanimously coded as promise. In addition, there were 27 messages coded as promise by a majority. Among 58 elicited promises there are 33 'unanimous' and 25 other promises. Among 14 unsolicited promises there are 12 'unanimous' and 2 other promises. Since we have only 2 observations in the latter case, we can not draw any inferences for unsolicited promises. For elicited promises, A players are slightly more likely to play *In* after a 'unanimous' promise (30 out of 33 observations, 91%) than after other promises (20 out of 25 observations, 80%). The difference is not statistically significant ($p = 0.23$, two-tailed proportions test). For B players, in contrast, promise keeping rates are slightly lower for 'unanimous' promises than for other promises, 45% (15/33) vs. 56% (14/25). This difference is also not significant at $p = 0.42$ for a two-tailed proportions test. Overall, since we do not observe significant differences between 'unanimous' and non 'unanimous' promises and because there are very few voluntary promises in the latter category we do not report our results separately for 'unanimous' promises.

[10] We checked whether elicited and voluntary (unsolicited) promises differ in length and found no statistically significant difference. Elicited promises in the *Two-way messages* treatment contain 36.9 words on average, while the average length of unsolicited promises in the *Two-way messages* treatment is 38.3 words (the difference is not significant, $Z = -0.35$, $p = 0.73$, two-tailed Wilcoxon rank sum test). The average length of voluntary promises in the *One-way message* treatment is 27.7 words, but it is not significantly different from the length of elicited promises in the *Two-way messages* treatment ($Z = 1.03$, $p = 0.30$, Wilcoxon rank sum test, two-tailed). The difference in the length of promises between two treatments (27.7 vs. 37.2) is also not significant ($Z = -1.18$, $p = 0.24$, Wilcoxon rank sum test, two-tailed).

Table 4
Promises and choices.[a]

	Promise rate	A *In* rate				B *Roll* rate			
		P	*NP*	*P + NP*	*Z* stat	*P*	*NP*	*P + NP*	*Z* stat
One-way message treatment	21/30 (70%)	14/21 (67%)	4/9 (44%)	18/30 (60%)	(0.23)	12/21 (57%)	3/9 (33%)	15/30 (50%)	(0.21)
Two-way messages treatment	72/84 (86%)	57/72 (79%)	2/12 (17%)	59/84 (70%)	4.38*** (0.00)	35/72 (49%)	2/12 (17%)	37/84 (44%)	2.06** (0.02)
A solicits a promise (AR + AP)	58/61 (95%)	50/58 (86%)	1/3 (33%)	51/61 (84%)	–	29/58 (50%)	1/3 (33%)	30/61 (49%)	–
Ask to promise (AP)	32/34 (94%)	30/32 (94%)	1/2 (50%)	31/34 (91%)	–	17/32 (53%)	1/2 (50%)	18/34 (53%)	–
Ask to Roll (AR)	25/26 (96%)	19/25 (76%)	0/1 (0%)	19/26 (73%)	–	11/25 (44%)	0/1 (0%)	11/26 (42%)	–
A does not solicit a promise (NA)	14/23 (61%)	7/14 (50%)	1/9 (11%)	8/23 (35%)	* (0.07)	6/14 (43%)	1/9 (11%)	7/23 (30%)	(0.12)

[a] P and NP stand for promise and no promise, respectively. The *Z* stat reflects two sample proportions test for the population of subjects who received/made a promise and the population of subjects who did not. We do not test for significance if one of the populations has fewer than 5 observations and we use Fisher exact test if one of the populations has less than 10 observations. *p*-values for one-tailed test are reported in parentheses in columns *Z* stat. *, **, and *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively for one-tailed test.

When A does not ask for a promise or for a roll (row NA), the promise making rate is 61% which is significantly lower than the rate of 95% with solicitation (AP + AR) (Z stat = −4.00, $p < 0.0001$, one-tailed test). The promise making rate in the *One-way message* treatment (in which A can not send a message) is lower than the rate in the *Two-way messages* treatment when A solicits a promise (70% vs. 95%, Z stat = −3.32, $p < 0.0005$, one-tailed test) and insignificantly higher than the rate when A does not solicit a promise (70% vs. 61%, Z stat = 0.69, $p = 0.48$, two-tailed test). Overall, the results reported in Table 4 show that when given the opportunity 73% (61 out of 84) of trustors try to elicit a promise from the trustee and this drives up the promise making rate to almost 100%.

4.3. Choices and beliefs

In this section, we discuss how A and B players' choices and beliefs depend on the content of communication.

Table 4 reports A player *In* rates for both treatments. For the *One-way message* treatment the *In* rates are reported separately for A players who received a promise and for A players who did not receive a promise. For the *Two-way messages* treatment the *In* rates are reported depending on the content of A messages and whether or not a promise was made by the B player. Overall, in both treatments A's were more trusting when they received a promise than when they did not. The effect of promises on trust by A players seems to be stronger in the *Two-way messages* treatment.

Do A's trust solicited promises more than unsolicited promises? Our results suggest that the answer is yes. First, solicited promises in the *Two-way messages* treatment are trusted more than voluntary promises in the *One-way message* treatment (86% vs. 67%, $Z = 1.96$, $p = 0.05$, two-tailed test). Solicited promises in the *Two-way messages* treatment are also trusted more than unsolicited promises in the *Two-way messages* treatment (86% vs. 50%, $Z = 2.99$, $p = 0.003$, two-tailed test). The fact that solicited promises are trusted more than unsolicited promises can be explained by self-selection. A players who can be easily convinced to play *In* elicit a promise and skeptical A players do not elicit a promise. Nevertheless, A *In* rates reported in the last row of Table 4 suggest that skeptical A players are also affected by promises. They are more likely to play *In* when they receive a promise than when they do not.

In Table 4 we also report B choices according to the content of communication for both treatments. To test the predictions about *Roll* rates stated in our hypothesis we first compare the *Roll* rate when A solicits a promise in the *Two way messages* treatment with the *Roll* rate in the *One-way message* treatment in which A can not solicit a promise. The *Roll* rates are clearly not different (they are almost equal, 49% vs. 50%, $Z = -0.1$, $p = 0.9285$, two-tailed test).[11] When A solicits a promise in the *Two-way messages* treatment there are more promises made and B's second-order beliefs are significantly higher than in the *One-way message* treatment as we will see below in Table 5 (66.48 when A solicits a promise vs. 52.83 in the *One-way message* treatment, $Z = 2.77$, $p = 0.0028$, one-tailed test). Still, the *Roll*rates are not different. Within the *Two-way messages* treatment the *Roll* rate is higher when A players solicit a promise than when they do not (49% vs. 30%). This difference, while substantial, is insignificant with a two-tailed test ($Z = 1.54$, $p = 0.12$). This can be due to a small number of observations in our NA category.[12] The difference

[11] The power analysis yields a power of 0.90 for a two-tailed test with $\alpha = 0.10$ and a hypothesized effect of size 0.3 (0.8 when A solicits a promise in the *Two-way messages* treatment vs. 0.5 in *One-way message* treatment where A can not solicit a promise).

[12] The power analysis yields a power of 0.50 for a two-tailed test with $\alpha = 0.10$ and a hypothesized effect of size 0.2 (0.5 when A solicits a promise in the *Two-way messages* treatment vs. 0.3 when A does not solicit a promise in *Two-way messages* treatment.) For the observed empirical *Roll* rates to be significantly different we would need approximately 99 observations in total (assuming that approximately 73% of As would solicit a promise and 27% would not when given the opportunity to do so).

Table 5
Promises and Beliefs[a]

	A's average first-order beliefs				B's average second-order beliefs			
	P	*NP*	*P + NP*	*Z* stat	*P*	*NP*	*N + NP*	*Z* stat
One-way message treatment	49.76 (26.75)	45.83 (24.17)	48.58 (25.65)	0.51 (0.30)	54.05 (23.10)	50.00 (22.47)	52.83 (22.60)	0.64 (0.26)
Two-way messages treatment	60.94 (24.56)	40.83 (27.03)	58.07 (25.75)	2.45*** (0.01)	64.20 (20.91)	42.08 (26.69)	61.04 (23.00)	2.72*** (0.00)
A solicits a promise (AR + AP)	63.27 (23.64)	50.83 (31.75)	62.66 (23.91)		66.38 (19.26)	68.33 (18.76)	66.48 (19.09)	
Ask to promise (AP)	68.83 (18.07)	60.00 (38.89)	68.31 (18.90)		69.45 (18.89)	58.75 (12.37)	68.82 (18.62)	
Ask to Roll (AR)	56.70 (28.49)	32.50 (–)	55.77 (28.32)		62.40 (19.75)	87.50 (–)	63.36 (19.97)	
A does not solicit a promise (NA)	51.25 (26.80)	37.50 (26.52)	45.87 (26.96)	1.22 (0.11)	55.18 (25.56)	33.33 (23.32)	46.63 (26.51)	1.90** (0.03)

[a] The Z stat reflects Wilcoxon rank sum test for the population of subjects who made a promise and the population of subjects who did not. We do not test for significance if one of the populations has fewer than 5 observations. *p*-values for one-tailed test are reported in parentheses in column *Z* stat. *, **, and *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively for one-tailed test. Standard errors are reported in parentheses.

seems to be driven by the fact that B players who do not make a promise when A's do not ask for it are very unlikely to cooperate (but we have only 9 observations in this cell). These results suggest that asking for a promise when given the opportunity to do so is better than not asking for it. It is plausible that not soliciting a promise is perceived as a signal of mistrust by the B player, to which B players respond by being untrustworthy.[13]

Regarding the promise keeping rates, the data in Table 4 shows that the promise keeping rate for the solicited promises in the *Two-way messages* treatment is slightly but insignificantly higher than the promise keeping rate for the volunteered promises in the *Two-way messages* treatment (50% vs. 43%) and slighly lower than the promise keeping rate for the volunteered promises made in the *One-way message* treatment (50% vs. 57%). If we combine volunteered promises in both treatments, then the promise keeping rate is 50% (vs. 51% for elicited promises). Overall our data suggests that promise keeping rates do not depend much on whether a promise was elicited or not elicited by A players. Below we do the same analysis controlling for the second-order beliefs of B's.

Table 5 reports beliefs data for A's and B's. The data reported in the table suggests that higher expectations in the *Two-way messages* treatment are due to elicited promises. The data shows that B's, in general, are able to correctly infer when A's are relatively more optimistic about the outcome of the game. In particular, B's second order beliefs are higher in case A's solicit a promise in the *Two-way message* treatment than in the *One-way message* treatment (where A can not solicit a promise) and also higher than in the case A does not solicit a promise in the *Two-way messages* treatment (66.48 vs. 46.63, $Z = 3.15$, $p = 0.0008$, one-tailed test). A's are significantly more optimistic about the cooperative outcome after elicited promises than both after voluntary promises in the *One-way message* treatment (63.27 vs. 49.76, $Z = 1.64$, $p = 0.02$, one-tailed test) and in the *Two-way messages* treatment (63.27 vs. 51.25, $Z = 1.64$, $p = 0.05$, one-tailed test). B's guessed (correctly) that A's were more optimistic about the Roll rate after a solicited promise (66.38) than after a voluntary promise in either the *One-way message* treatment (54.05) or the *Two-way messages* treatment (55.18). B's anticipate that a trustor who asks for a promise will also appreciate receiving one. Nevertheless, promise-keeping rates are not different for solicited and unsolicited promises.

As discussed above we observe higher second-order beliefs for B's with elicited promises, but the promise keeping rates are not significantly different with elicited promises than with voluntary promises. This suggests that B's guilt sensitivity was reduced somewhat by promise elicitation but not substantially. To further explore this we run a logit regression where we test whether controlling for the second-order beliefs B's who made an elicited promise were less likely to *Roll* (i.e., keep their promise) than B's who made a voluntary promise. In terms of the model of Section 2.1, keeping $\tau(p)$ constant is γ smaller for elicited promises than for voluntary promises? To increase the power of our regression we include voluntary promises from both treatments in our regression (this results in 93 observations in total). The standard errors are reported in parentheses.

$$\begin{array}{lcccccc} \text{Roll} & = & - & 2.71 & - & 0.66\text{Elicited} & + & 5.01^{***}\text{Second Order Belief} \\ & & & (0.85) & & (0.51) & & (1.34) \end{array}$$

[13] Are subjects better at coordinating on *In&Roll* outcome when A's solicit a promise than when A's do not solicit a promise? When A's solicit a promise the rate of *In&Roll* outcomes is 41%. This is exactly the same as the expected rate of *In&Roll* outcomes, if *In* and *Roll* decisions were independent, 84%(*In* rate) × 49%(*Roll* rate) = 41%. When A's do not elicit a promise the actual rate of *In&Roll* combinations is 13% which is slightly higher than the expected rate of 30%(*In* rate) × 35%(*Roll* rate) = 10.5%, if *In* and *Roll* decisions were independent.

The coefficient on *Elicited* dummy variable (which is equal to 1 if a promise is elicited and 0 when it is voluntary) is negative, but not significant ($p = 0.192$).

5. Discussion and conclusion

We conducted an experiment to study whether trustors elicit a promise from the trustee in the trust game and whether it is effective to do so. In particular, we were interested in how promise elicitation by one's partner affects trustworthiness and promise keeping rates.

Our results show that a substantial fraction of the subjects asks for a promise when given the opportunity to do so. Moreover, those who solicit a promise are generally more trusting than those who do not. Trust is generally higher after a solicited than after a voluntary promise. This is also anticipated by the trustees.

We do not find significant differences in trustworthiness rates when trustors elicit promises than when they can not elicit promises with one -way communication. We also do not find significant difference in promise keeping rates between solicited and voluntary promises. So, we do not find support for moral crowding out, that is, trustees feeling excused to break a promise they were 'forced' to make. Nor do we find support for the hypothesis that a (correctly) anticipated higher level of trust after a solicited promise will lead to more promise keeping by trustees, as hypothesized by expectations-based guilt aversion.

Nevertheless, our results suggest that asking for a promise when given the opportunity is better than not asking for it because trustworthiness is lower in the latter case. This result is driven by the fact that subjects who do not make a promise when the trustor does not ask for one are very unlikely to be trustworthy (although we do not have many observations in this case). Not asking for a promise is perceived as a signal of skepticism and mistrust and trustees respond by being untrustworthy.

Our paper is also related to recent studies on agreements and norms (Dufwenberg et al., 2016; Kessler and Leider, 2012; Krupka et al., 2016; Miettinen, 2013). These papers suggest that people receive a disutility from breaking informal agreements. The existence of such an agreement makes it more likely that the subjects will follow it. Note that when the trustee makes a promise to cooperate in response to the trustor's request, we can think of it as an agreement between the trustor and the trustee. Hence, one would expect higher cooperation rates by B's when A elicits a promise than when A cannot elicit a promise because there are more agreements in the former case. However, we do not observe higher cooperation rates by B's when A elicits a promise.[14] Apart from differences in the underlying games, the difference between our results and those of Kessler and Leider (2012), Krupka et al. (2016) and Dufwenberg et al. (2016) could be driven by the fact that these three papers study how the existence of informal agreements affects cooperation rates relative to treatments with no communication. In our study, however, we compare one-way communication with two-way communication which is a more subtle difference.

Summarizing, our results show that the increased rate of promises and higher second-order beliefs of trustees in response to promise elicitation do not lead to a substantial increase in trustworthiness. Any effect of beliefs seems to be compensated by a reduced sensitivity to guilt. The latter effect, however, is not strong enough to lead to a decrease in trustworthiness.

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Appendix A. Charness and Dufwenberg (2006, 2010) results vs. our results

For reference, in Table A.1 below we report A *In* rates and B *Roll* rates for both treatments in our study and for relevant treatments from Charness and Dufwenberg (2006, 2010).

Appendix B. Instructions

Thank you for participating in this session. The purpose of this experiment is to study how people make decisions in a particular situation. Feel free to ask us questions as they arise, by raising your hand. Please do not speak to other participants during the experiment.

You will receive €3 for participating in this session. You may also receive additional money, depending on the decisions made (as described below). Upon completion of the session, your money will be paid to you individually and privately.

[14] If we specifically look at the messages that contain the word 'agree' and/or its derivatives (like 'deal'), the cooperation rates are not significantly higher than the rates for other messages. In total, there are 11 messages that contain the word 'agree' and/or its derivatives. For these messages the *Roll* rate by B players is 45% (5 out of 11) compared to the *Roll* rate of 50% for the remaining 50 messages in which A elicits a promise. The difference is not statistically significant (Z stat = −0.27, p-value = 0.61, one-tailed test). The *In* rate by A's is 91% for these messages compared to 82% for the other 50 messages in which A elicits a promise. While the *In* rate appears to be higher for the messages that contain the word 'agree' and/or its derivatives, this difference is not statistically significant (Z stat = 0.72, p-value = 0.24, one-tailed test).

Table A.1
Promises and choices.[a]

	Promise rate	A *In* rate				B *Roll* rate			
		P	*NP*	*P + NP*	Z stat	*P*	*NP*	*P + NP*	Z stat
Our study									
One-way message treatment	21/30 (70%)	14/21 (67%)	4/9 (44%)	18/30 (60%)	(0.23)	12/21 (57%)	3/9 (33%)	15/30 (50%)	(0.21)
Two-way messages treatment	72/84 (86%)	57/72 (79%)	2/12 (17%)	59/84 (70%)	4.38*** (0.00)	35/72 (49%)	2/12 (17%)	37/84 (44%)	2.06** (0.02)
A solicits a promise	58/61 (95%)	50/58 (86%)	1/3 (33%)	51/61 (84%)	–	29/58 (50%)	1/3 (33%)	30/61 (49%)	–
A does not solicit a promise	14/23 (61%)	7/14 (50%)	1/9 (11%)	8/23 (35%)	* (0.07)	6/14 (43%)	1/9 (11%)	7/23 (30%)	(0.12)
CD (2006)									
B messages (5,5) treatment	24/42 (57%)	22/24 (92%)	9/18 (50%)	31/42 (74%)	3.04*** (0.00)	18/24 (75%)	10/18 (56%)	28/42 (67%)	1.32* (0.09)
No messages treatment	–			25/45 (56%)				20/45 (44%)	
CD (2010)									
Bare promises treatment	41/48 (85%)	23/41 (56%)	2/7 (29%)	25/48 (52%)	(0.17)	25/41 (61%)	3/7 (43%)	28/48 (58%)	(0.31)
No communication	–			25/45 (56%)				20/45 (44%)	

[a] P and NP stand for promise and no promise, respectively. CD (2006, 2010) stand for Charness and Dufwenberg (2006) and Charness and Dufwenberg (2010), respectively. The Z stat reflects two sample proportions test for the population of subjects who received/made a promise and the population of subjects who did not. We do not test for significance if one of the populations has fewer than 5 observations and we use Fisher exact test if one of the populations has less than 10 observations. *p*-values for one-tailed test are reported in parentheses in columns *Z* stat. *, **, and *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively for one-tailed test.

During the session, you will be paired with another person. However, no participant will ever know the identity of the person with whom he or she is paired.

Decision tasks

In each pair, one person will have the role of A, and the other will have the role of B. The amount of money you earn depends on the decisions made in your pair. Those sitting behind desks 1–12 have the role of A; those sitting behind desks 13–24 are B.

By clicking a button on the computer screen, each person A will indicate whether he or she wishes to choose IN or OUT. If A chooses OUT, then A and B each receives €5. Next, each person B will indicate whether he or she wishes to ROLL or DON'T ROLL (a die). Note that B will not know whether A has chosen IN or OUT; however, since B's decision will only make a difference when A has chosen IN, we ask B's to presume (for the purpose of making a decision) that A has chosen IN.

If A chooses IN and B chooses DON'T ROLL, then B receives €14 and A receives €0. If A chooses IN and B chooses ROLL, then B receives €10 and rolls a six-sided die to determine A's payoff. If the die comes up 1, A receives 0; if the die comes up 2–6, A receives €12. (All of these amounts are in addition to the €3 show up-fee.)

Note that to conceal the identity of B's who choose DON'T ROLL, every B will roll a die after making a choice. However, the outcome of a die roll will be irrelevant for those who choose DON'T ROLL.

The information on payoffs is summarized in the chart below: Table B.1

Pre-play message stage **[One-way message treatment]**

Prior to the decision by A and B concerning IN or OUT, B has an option to send a message to A. Each B receives a blank sheet on which a message can be written, if desired. We allow time as needed for people to write messages, then these will be collected. Please write clearly if you wish to send a message to A.

In these messages, no one is allowed to identity him or herself by name or number or gender or appearance. (The experimenter will monitor the messages. Violations - experimenter discretion - will result in B receiving only the show-up fee, and the paired A receiving the average amount received by other As.) Other than these restrictions, B may say anything he or she wishes in this message. If you wish to not send a message, simply circle the letter B at the top of the sheet.

When B has completed the message, he or she should put it face down on the table. The experimenter will then collect the message and check it.

Important: After all messages have been collected, exactly half of them will be randomly chosen by the experimenter. The messages not chosen will be replaced with empty sheets (i.e., without the letter B on top). Then, the experimenter will distribute the messages and empty sheets to the corresponding As. If A receives an empty sheet, it means that the message by B in his or her pair was not selected to be delivered. The identification numbers of all messages chosen will be written on the whiteboard so that each B knows whether or not his or her message will be delivered to A.

Table B.1

	A receives	B receives
A chooses OUT	€5	€5
A chooses IN, B chooses DON'T ROLL	€0	€14
A chooses IN, B chooses ROLL, die = 1	€0	€10
A chooses IN, B chooses ROLL, die = 2, 3, 4, 5 or 6	€12	€10

[*Pre-play message stage* [**Two-way messages treatment]**

Prior to decision task, A and B can send written messages to each other. The structure of this is as follows: First, message sheets will be distributed to all As and we will allow enough time for A to write a message to B in his or her pair. When all As finish writing message, we will collect message sheets and deliver them to the respective B's. After B receives and reads the message by A, he or she can write back a message to A. Message sheets will be provided to B's. When all B's finish writing, we will collect message sheets and deliver them to the respective As. This will conclude the pre-play message stage and you will proceed to decision task (as described above).

To summarize the pre-play message stage, first, A sends a message to B, and then after reading A's message, B sends a message to A.

In pre-play messages, no one is allowed to identify him or herself by name or number or gender or appearance. (The experimenter will monitor the messages. Violations - experimenter discretion - will result in you receiving only the show-up fee, and the other participant in your pair receiving the average amount received by others.) Other than these restrictions, you may say anything you wish in your message. If you wish to not write a message, simply circle the letter A (if you are A) or the letter B (if you are B) at the top of the sheet.

When you complete the message, please put your sheet face down on the table so that we know you finished your message. The experimenter will collect all message sheets when everyone is done.]

Bonus for guessing

At some point during the experiment, you can earn a bonus of up to €1.50 by correctly guessing a decision or outcome. You will receive the necessary information on your screen.

Information

Each player will know only her or his own earnings at the end of the experiment. Other than what can be concluded from these earnings, you will not receive any other information.

Appendix C. Coder instructions

Coder instructions

You will be paid €25 for this task. Your task is to code messages sent by participants in an experiment that was designed to study the role of communication in experimental games. Subjects played a game (that is described in instructions) in pairs. Two different treatments were run:

- One way message treatment where only one of the players (player B) can send a pre-play message to the other player (player A),
- Two way message treatment where, first, player A sends a message to B and, then, player B replies to A's message.

Coding guidelines

The messages are listed for each treatment separately in the attachment to this instructions. Please use the categories listed and explained below in your coding.

For B messages in the *one way message treatment*:

"P" - a promise or more generally a statement of intent to Roll by B.

"NP" - a blank message or a message that does not contain a promise or a statement of intent to Roll.

In the *two way message treatment*for A messages:

"AP" - a message that asks B about his/her intended play or whether he or she is willing to play Roll.

"AR" - a message that asks or solicits or encourages B to play Roll.

"NA" - a blank message or a message that is neither "AP" nor "AR". for B messages:

"P" - a promise or more generally a statement of intent to Roll by B.

"NP" - a blank message or a message that does not contain a promise or a statement of intent to Roll.

Appendix D. List of the messages

In Table D.1 below, Ca = majority coding for the A message, Cb = majority coding for the B message, AP = A asks B about his/her intended play, AR = A asks B to *Roll*, NA = A does not ask B about his/her intended play or to *Roll*, P = Promise, NP = No Promise.

Table D.1
Messages from A and B in both treatments.

Sess.	Pair ID	A message	B message	Ca	Cb
Two-way messages treatment					
1	1	BLANK	So, I'm guessing you not sending me a message means you'll opt OUT. Too bad. I'm happy to do the trade-off of rolling for €10,- and giving you a pretty decent chance of winning €12,- instead of us both receiving just €5,-. The out-option, just as the dont-roll option are just a waiste of money. So don't do it and you'll get €7,- more!	NA	P
1	2	If you agree to roll it, I promise to opt IN. DEAL?	Deal! Let's roll:-)	AR	P
1	3	I think I choose Out because I'm not sure you choose Roll. But you can choose Roll than I've got the risk and you get €10,- or you get €5. I've the risk for 0 or 12. So tell my why I must choose In!	You should choose In. The chance that I roll 1 is 1–6. The chance of rolling 2–6 is higher than 1. I am willing to choose Roll and roll the die. So that you have 12€ and I 10€. It is better than having 5€. So bottom line. I will choose ROLL and throw the die. It will be between 2 and 6 (the chance is bigger) and you have 12€ and I will have 10€. The 2€ more you have than me is the trust you give me. P.S. 12€ is better than nothing or 5€	–	P
1	4	In my view we both earn most if you do IN and I ROLL. Is that our tactic? I will stick to that. In all cases I get a little more if I do IN so for me it does not matter if you then do OUT, but then we both get less and that is stupid, right? In short The best idea is: you->IN me -> ROLL. (Translated by Jan from dutch)	You are the one who has to choose IN or OUT:). But it is fine with me to roll the 'die'. (translated by Jan from dutch)	AR	P
1	5	A: Good morning. Let's have a nice game!	B: Good morning! Let's hope so. I am willing to collaborate, you too?	NA	P
1	6	I 'll choose IN Please state whether you will Roll.	I'll choose ROLL, because that maximizes our outcome (22€) if you choose IN. (and hopefully I'll roll something else than 1)	AP	P
1	7	If you can promise me that you will choose 'roll', then I will choose for 'In'. That's a better idea than us both having 5 euros (and it will be good for your karma:p!)	OK. But if you look to the Nash equilibrium it is better for us both that you play out. But I'm ok that you play In. But I can't promise that I will play Roll. Maybe. If I've a good karma today I will play Roll for you:)	AP	NP
1	8	Since B will get rewarded each decision he/she made, it depends on me to choose. For this reason, my decision is clear. May the dice decise! I go for it, how about you?	My first thoughts were not to roll the dice, however since my payoff will only increase with 4 euro and yours (Ex) with 10 euro's I will be fair and roll the dice. (After your message, I would have felt too guilty to betray you. It is inspiring.)	AP	P
2	1	BLANK	Whatever you decide, know that I will always ROLL. Its up to you if you want to get a sure 5€ or 1/6 chance 0€/5/6 chance 12€. If you choose IN and I ROLL, both of us will get a higher payoff. So ultimately its your choice:)	NA	P
2	2	Dear B, let's make a deal. I'll choose in, and you roll. We'll be both better off if we have luck with the die. Hope you won't trick me.:)	Dear A, I think it's a good idea to make a deal. I'll choose Roll, then you have only a 1/6 chance that the die come up 1. So we will be indeed better off both. (a drawing at the bottom of the page)	AR	P
2	3	Hi, So I think that choosing OUT would make this very boring for both, but it is the safest way to get the €5. Do you agree on choosing to roll the die and take the guess? That way we will make the greatest total profit. (you get €10 anyhow and I take the 5/6 chance of getting €10 and a small chance of getting nothing.) Good luck!	Hey, I agree that roling the die is the best option for both and most fun. We can choose too roll and next round don't. You too good luck!	AP	P
2	4	What' your decision? Roll or don't roll? Are you happy with 5 euros or do you want to have a fair game?	For me, my decision does not matter if you choose 'OUT'. So I know that my decision only matters when you choose 'IN', and that is the case when you trust I will choose 'ROLL'. I prefer to be fair and reward your trust in this case, since the payoffs (12, 10) are so much larger than all the other options. I cannot credibly commit since that is against the rules, but i like to reciprocate fairness. I will choose 'ROLL'.	AP	P
2	5	Hey, In case we choose (IN) with combination (ROLL), we will both receive maximum profit in the long term. Thus, I choose "IN". P.S. 'DON'T ROLL' is not cool.	Yes, we are both better off if you choose IN, so the suggestion seems fair. Wish you good luck hope you'll get 2, 3, 4, 5, or 6!:)	AR	P
2	6	Well, it's a trust game. Choosing OUT is not beneficial nor for me, neither for you. Even though I choose IN, my risk is way higher than yours. My suggestion is IN and Roll, what do you think, how can I trust you and not choose OUT?	Well, I don't like screwing people for a few euros. You bear all/most of the risk in the rolling, therefore I think it is fair that you get 12 if everything goes well. Since I am not allowed to identify myself it is all about trust. If I was allowed to identify myself i would give you my phone number to share the winnings if "1" is he outcome, so that there is no risk for you. Let's be positive and hope for the best.	AP	P

Table D.1 (*continued*)

Sess.	Pair ID	A message	B message	Ca	Cb
2	7	Hi there, Do you promise to ROLL? If, yes, then I will surely choose IN. Have a nice day!:) P.S. Let's be rational and generate the biggest surplus possible.	Hi there, I am in! I will try to do my best to roll 2–6. Winning together is better. Have a nice day.	AP	P
2	8	Hi! I will choose IN, so you will at least earn 5 euro's more than when I choose OUT. So could you please choose roll? Good for you, good for me!:-)	Hey! Thanks for choosing IN. I will choose ROLL for you, then you have 5/6 chance to earn 12 EUROS. Bye, bye.:-)	AR	P
2	9	I choose In. Please Roll. Die = 2, 3, 4, 5, or 6. It's double win otherwise I will choose Out. Then you will lose at least €5. €9.	Sure. I was already planning to choose ROLL because I think it's fair that everyone gets a bit of money =) And €10,- is better than €5,-	AR	P
2	10	Given the setup of the experiment, A would choose OUT and B would choose DON'T ROLL. This would give €5 each. But we could increase it 2x by agreeing to play IN&ROLL. This would give you 10€ for certain & me $1/6 \times 0 + 5/6 \times 12 = 10$€. So can we agree on ROLL?:)	Hi there, I agree. For me In + Don't Roll is the best option, but if I choose it I am the jerk type of guy. You can trust me. I will choose Roll. Now I hope you choose IN and the dice will role 2, 3, 4, 5 or 6. We have a deal, Have a nice day.	AR	P
2	11	BLANK	I've seen you haven't written anything. I know that I am in the most comfortable position, but I would like to convince you. Would you like only the €5 euros extra, or would you like to get the jackpot? I swear by God's name that I 'll vote for the highest collective profit, so I will choose ROLL. Then you have a 5/6 chance to get the €12 euro extra, which make you a €17 wealthy man, but then you have to choose IN. Thank you. (I've done this experiment a lot of times and it always ends in a disappointment, so please have a little faith in this partner and please let make us rich).	NA	P
2	12	I will always choose in, but if I realize you'll play don't roll too much I will always play out. If we stick to playing IN and ROLL, were both best off	Hi, I will choose Roll at all times. Please do not be tempted to choose out because 5/5 is worst that 12/10. I can truly assure you that I will not deviate, because the 4€ I get more (14€ − 10€) will leave you nothing. I played Creed before so i know how it is to go with nothing. We are all students after all! I will definitely choose Roll:)	AR	P
2	13	BLANK	please choose IN. and we both have a good win.	NA	NP
4	1	A	BLANK	NA	NP
4	2	BLANK	It is better to choose in and I will choose Roll for sure, to get higher payoff.	NA	P
4	3	Hi there, B! Can I trust you to choose ROLL? In that case I will choose IN, so you will earn €10 instead of €5! I will get €12, but also take the change of receiving €0. And giving you €10 instead of €5 when I would choose OUT. How does that sound?:) A.	Hey Fellao A! OK, I think it benefits us both if you choose IN and yea why not, I 'll choose ROLL!	AR	P
4	4	Makes sense for me as an A to choose "IN". Hope you choose to roll.	Sure, don't worry, I won't leave you empty handed. I 'll choose Roll. You have 5/6 of a chance to win €12,-. Good luck!	AP	P
4	5	Do not disappoint me. I'm taking the risk, which will make us both(hopefully) happy. Thank you. PS: no 1 please.	Let's cooperate. Wish us good luck!	AR	P
4	6	Dear Bee, I've never seen you before but I love you, I know you're a good person when hearing this crazy eastern european guy explain the experiment you might have thought about screwing me over. However, this will cost you and me both, since if I receive €0,- more often then 1/6 (16%) of the times, I will have no choice then deciding to choose out, securing my. . .. €5,-. Let's clean these guys together! Let's f'cking cooperate!:) Love and kisses A.	Dear A, after reading you nice message I have nothing to say except that if you choose IN, I will choose ROLL.	AR	P
4	7	I choose 'In', if you choose 'Roll'	Thanks for your trust! I'll roll, that's a guarantee!:)	AR	P
4	8	Hi, If I choose IN and you choose ROLL we have a chance of 5/6 to both win more than 5€. If you die 1, I have 0€. So that's a risk. If I choose OUT, we both have €5. But if you choose 'DONT ROLL' I win nothing. So I'll have to trust you choose ROLL. Will you choose that or do you think something else is better?	Hi, I will choose Roll, because it's a win situation. The reason why I won't choose 'don't roll' is because the difference between Roll and don't roll is only €4 for me. It's not big. I want a win situation, so we both have to help each other and choose In and Roll. Or we will both lose.	AP	P
4	9	Dear B, Enjoy the experiment. Greetings, A.	Dear A, Thanks, you too. B	NA	NP
4	10	Hey unknown! How was your day till now? I think this experiment is pretty funny. I've never written notes to someone I didn't know en will never know probably. So let's make the best of it. What will you be doing tonight? I will go to Diana Krall in concert! Oh, and I should ask if you want to roll the dice, cause then I choose in! I didn't come to not play the game:) write me back soon! xx (would be nice if this letter would be send by a white pigeon. . .)	Hi! Nice of you to write me such a nice message. I think this is kind of a weird experiment, but let's just get it over with I really don't know what to choose, but I think I will choose Roll, so we can both make some money! That would be good! Tonight, I'm going to have dinner with my sister. Have fun at your concert, and please choose 'in':).	AR	P

(*continued on next page*)

Table D.1 (*continued*)

Sess.	Pair ID	A message	B message	Ca	Cb
4	11	If I choose to go IN, will you ROLL with 100% certainty? Or else you have €14 and I have none So I like to go IN, you Roll?	I will ROLL THE DICE. I hope it will not turn out to be 1 so that we both get a higher payoff.	AP	P
6	1	Hello B, I want to choose OUT so I'm sure I will earn money (more that the participating amount of 5€), but maybe you can change my mind, if you have a good offer. Let me know, A.	Hello A,I am going to choose Roll, because if you choose Out, my choice doesn't matter anyway so I just can choose that one. But I guess I've got a bigger opportunity to earn some money if I choose Roll, because than you migh choose In and have 5/6 chance on €12. So my propose for you is to choose In, I will go for ROLL anyway, (I promise you). B.	AP	P
6	2	Dear B, Let's cooperate and make sure we both end up with additional money. So, please choose roll when I decide to be in. If you're not willing to do that, I obviously will not be in. Because what are 4 euros in a lifetime? Thank you, A.	Dear A, Let's do it, the way you said:). I don't care if you get more than me as long as I get a lot too. Let's be generous & I hope the dice will be in our favor. Sincerely, B.	AR	P
6	3	Hi:)! Let's maximize our total profit ok? That's the best for the both of us.	Agree	AR	P
6	4	Convince me.	Trust me, if you want more than 5 euro's extra, because I do. Choose In, I'll roll so we both get more money.	AP	P
6	5	You will never choose to roll, so I'll choose out.	That's exactly what everybody assumes. I want to make more money. Choose In and I will Roll. Sounds to me like a win–win situation.	NA	P
6	6	You always have to choose the option Roll!	I thought you would say that, it's the best outcome for you, but I'm not entirely sure. If the die = 1, you get nothing. So, good luck!	AR	NP
6	7	hi, what are you going to do? Roll or don't roll?	Hi! For me it's better when you choose IN. I will receive more money. Therefore I am writing to choose roll so that you have 5/6 chance on more money too (if I choose don't roll you will choose OUT so it's better for both to choose IN ->ROLL). Let's hope for a 2, 3, 4, 5, or 6. =)	AP	P
6	8	I choose OUT	Coward	NA	NP
6	9	Hi, how are you doing? I want to suggest a game plan for us. We, both, will make more money if we use our common sense. This is what I was thinking:If I choose 'IN' and you choose 'ROLL', you will definitely make €10 (see payoff chart). If you then roll the die and it roll on '1', I will be unlucky, but you still €10,-. But if it will roll on '2–6', I will be more lucky to earn euro 12 and you still will earn €10. So to conclude if I choose 'IN', will you choose 'Roll'? Please let me know if we have a deal. Greetings from your partner	Hi partner, beautiful plan! We have a deal. If you choose 'IN' I will choose 'Roll'. I hope you will be lucky and that you earn €12,- (I will try my best when rolling the die). Greetings from your partner. P.S. then we also earn the euro 1,5 bonus if we both stick to our choices.	AR	P
6	10	I would be willing to choose IN if you can assure me that you will pick ROLL. I know this gives you a payoff that is a bit lower but I could also pick OUT and you would only get 5€. Please pick Roll and give me the chance to earn at least some money. If you don't agree or I don't think you'll stick to your word I will choose OUT to at least receive 5€. Hope you agree thanks in advance.	I will choose roll, it's the most fair I think. You will give me a chance for more money, so I will do that as well. Lets hope for a 2, 3, 4, 5, or 6!	AR	P
6	11	BLANK.	Please choose in. I will then choose roll for sure. Chance will decide if you get €12,- or €0,-, but the chances of getting €12 are of course higher. Always believe!	NA	P
6	12	So, you're in a better situation than I am but I am responsibly for you winning more than €5(which you certainly will if I choose 'in'.) But how can I be sure that you won't screw me and choose not to roll? If you don't come up with a good argument it certainly is better for me to be out…I do realize that you win the most by choosing not to roll. I can't do more than hoping you'll be honest…	Ok, I was going to tell number A that I would "roll" and then secretly choose "not roll", but your message has changed my mind. Of course, it is still up to you if you want to believe me, but I ask you to have a little faith. I promise I will choose "roll"! This will give you 5/6 chance to win €12,-. still 1/6 that it's nothing…. It's up to you A!	AP	P
7	1	Can I be sure you choose ROLL? Then I choose IN.	It is clear that IN-ROLL is the best choice, 12 + 10 = 22 compared to 5 + 5 = 10. Let's roll it.	AP	P
7	2	Hi, I am writing you to ask if its possible to choose ROLL. I guess there is no need to convince you that by choosing ROLL, simply cooperating we both earn. Cooperate man, cooperate:) We will both benefit if you choose ROLL. Looking forward to get back from you. Don't forget to hustle through rain, wind or tornado:) Sincerely,	Hi there! Rolling it is! I think that's clear. Enjoy the earnings.	AR	P
7	3	BLANK	Hello A. Choose IN! I will choose to Roll. The expected return will be the same. For me €10, and for you (5/6 × €12 + 1/6 × €0=)€10. Don't choose OUT. That's giving money to CREED, while we as students need it! You can trust on me! Regards B.	NA	P

Table D.1 (*continued*)

Sess.	Pair ID	A message	B message	Ca	Cb
7	4	We both win on the 4th situation, with a higher probability then in all the other outcomes. Play the 4th option?	That seems to be okay with me. Let's play option 4.	AP	P
7	5	Can I trust you?	To just screw this experiment, they want to know how much of us will choose the Nash Eq. (5,5). I don't care about the extra 4, Just want to make their experiment biased. Your chances of getting 12 will be 5/6 and basically the same as 1/6∗0 + 5/6∗12 = 10. If you choose In, I can make your decision worthwhile! =) (depicts extensive form of the game.)	AP	P
7	6	Dear colleague, I am willing to opt "IN" as long as you choose to "Roll" the die. Please, let me know of your choice! =) Let's make everybody happy! Best regards, Partner A.	Dear partner A, I think the most fairest way to do this game is for me to reciprocate your opt in choice! I think it is best for both of us, you 'hopefully' then get €12 and I €10. So I will roll the dice. Good luck! Partner B.	AR	P
8	1	Hi there, nice experiment eh? Well as you have noticed the amount of money we can earn depends on both our decisions. I have to buy a birthday present for my little brother. So it would be vry nice if I can get more from this experiment than the 5€. My question is now- would you please choose Roll? We both can earn money!! please!the idea for the coming holidays is "Give & help each other:) my little brother would be very thankful.	Hi, I think the experiment is kind of boring But anyway, lucky for you I'm in the holiday spirit;). But you better buy your brother a really awesome present now.	AR	NP
8	2	Will you take a risk of rolling?	Hi A, In this experiment I want the best for both of us. I will roll the dice, assuming that you'll be in.	AP	P
8	3	Hi! I am obviously in the worst position, since B's get between €5-14 and A's have a big chance of gettting €0. And us A's have to trust you B's! So the safe option for me would be to choose OUT and we each get €5. However, it would also be nice for you to have €10, and my fate depending on the dice, being either €0 or €12. But you can then of course fuck me and choose OUT, so it all depends on trust and if you decide to be a nice person/can live with guilt/. I hope you would like your fellow poor student to have some money as well:) what do you say?	Dear A, I am so sorry you are in the position you're in. I will chose roll no matter what you chose, and if you decide to chose In, I hope the die will be more than 1, for your sake. Best wishes, B.	AR	P
8	4	Dear Mr. or Mrs. B, it seems obvious to me that you would like me to choose IN since that will lead to higher payoffs for you. There is a risk attached to this choice for me though, since it's possible that you'll choose not to roll and I'm stuck with €0. I think the following scenario would be beneficial for the both of us: I choose IN and you choose ROLL. To persuade you I have drawn a beautiful flower for you below: (a flower is drawn) with regards, Mr. A:) this is what I will look like if you choose to roll.	Dear Mr. A (or should I say Ms?), I was very endeared by your beautiful flower. Honestly I thought about choosing don't Roll, but I don't want you to look like this: (. It's almost christmas, so I don't care that much about 2 euro's more or less. Let's follow your scenario and you can buy me a flower as a thank you afterwards (flower drawn) Kind regards, Mr. or Mrs. B.	AR	P
8	5	We don't know each other, why should I trust you that you will throw a die if I choose "In"?	I will choose Roll, because I'm already happy that you did not choose OUT. In that case we would both be worse off. I will reward you for choosing IN for that reason.	AP	P
8	6	Spend government money TOGETHER, so IN and Roll or do you play for yourself?:)	Hi A, I totally agree, I study economics and we discuss game theory all the time. Prediction is you will not go in because you expect me not to roll. But I will roll, because 10 > 5 for me and I believe in sharing the benefits! Your B.	AR	P
9	1	Hello, I would like to take a risk and opt for IN. seeing I do not know anything about you I will play it safe and opt for our, thereby ensuring both you and me get a fair amount of money. Greetings.	Hello, I'd prefer to maximize both of our profit. So I'd suggest you opt for In. And I'll play "Roll" anyways. Greetings.	NA	P
9	2	Hey B, We can both collect a lot of money if we trust each other. I will choose IN only if you will choose to ROLL. Either way I will be taking a lot of risk by choosing IN because I can get €0,-. So I have to be sure you will ROLL, and then I will choose IN and we can both earn a lot of money. I trust you to take the right decision. Bye, A.	Hello A, You find yourself in a precarious position where u have to depend on my decisions, and granted it is a difficult position with a huge dilemma. However, due in part to your inspirational message, I am here to maximize both our earnings and will therefore choose to ROLL the dice. It will take a lot of faith on your part, but i hope to recognize you by the big smile on your face at the end. Cya, B	AR	P
9	3	I can choose OUT. Just to make sure that I will get any money or I can choose IN if you want to ROLL.. But since you're always better of when you DON'T ROLL I don't think that you will ROLL.	I CHOOSE ROLL, It is more fair. That you are A and I am B is by chance it would be fair to choose the highest amount for both ->ROLL (I won't ROLL 1).	NA	P
9	4	I'll choose OUT, no matter what, sorry. If you want to earn the guessing bonus I'll advise you guess that I'll choose OUT. After your message to me I can not write back, so I want to be really clear that I'm going to choose OUT.	I'm fine with that!	NA	NP

(*continued on next page*)

Table D.1 (*continued*)

Sess.	Pair ID	A message	B message	Ca	Cb
9	5	BLANK	BLANK	NA	NP
9	6	Hello	Hi there, I promise to choose Roll if you choose IN!	NA	P
10	1	Wassup? Maximum pay-off for each other?	Yeah, good idea, I'll roll the die.	AP	P
10	2	You have nothing to lose so Roll the die:)	You're right so I will roll the die! Good luck to both of us! I'll do my best.	AR	P
10	3	A: €12,- B: €10,-? DEAL?:) I hate winter: (	Deal! Seems fair, B is on the lucky side anyway. And yeah, winter sucks big time. I like snow though.	AP	P
10	4	I will chose IN for the experiment, hence you should choose roll because there is a high possibility to get a higher payoff for both.	I agree. I will choose ROLL.	AR	P
10	5	BLANK	CHOOSE IN I'LL CHOOSE ROLL BETTER FOR THE BOTH OF US! €10 BOTH OR A:€17/B:€15.	NA	P
10	6	I will choose for 'in', if you can promise to choose for 'ROLL'. Will you do that? It's the most fair..	I will do that, let's hope it's comes out for both of us	AP	P
10	7	BLANK	Wow, no message for me? That means you going home with 5 euros today. Enjoy them. Just play in. send me back a message and let's go for the best option. Roll the die and go for 2–6. So we both get more than euro10. sounds good? Let me know.	NA	NP
10	8	Did you see AJAX YESTERDAY? Horrible game. 2 pure goals taken away from us. That ref should never wistle a game again. I'm still angry about it. What about you?	Haha, no I didn't see the game of Ajax against Real Madrid, But I heard a lot about it! I think it was not very fair! 3–0 poor Amsterdam. But how about this game?? If we play it fair, you choose In and I will choose for Roll and then we both have a high payoff:) Agree?	NA	P
10	9	You have no incentive to roll. I'm gonna choose out, and we'll both lose if you can't commit to roll.	I don't care about an additional 4 euro, where your expected value is 1/6∗0 + 5/6∗12 = 10. Thus, I Roll.	AR	P
11	1	It's best for A to choose In and for B to ROLL -> maximum profit.	You are right, it leads to 12 + 10 = 22€ total profit. I will choose Roll if you choose In.	AR	P
11	2	I will be trusting you to maximize total(!) payout and thus will always pick IN, even though telling you this gives you incentives to chose NOT ROLL but I'll leave that up to you:) to decide.	Obviously I want you to choose in since that will maximize my payoff. I feel strongly as well about maximum total payoff, since we are all students and I know how annoying it can be to walk out of this room almost empty-handed. So I will choose roll and I hope you stay in, since that will be the best outcome for both of us then This will also give us the guessing bonus as an extra.	AR	P
11	3	BLANK	Hi A, I promiss to choose ROLL, so if you choose IN, you have 5/6 chance that you earn €12 instead of €5, and we will be both better off.:) Good luck with your decision!	NA	P
11	4	Hi! If I choose in, could you please Roll? The chance is 5/6 that we will both receive more money!:) OK with u?? Bye.	HI! Yes of course I will roll. We both benefit then. Hope it will not be 1:) Good luck! (and choose IN)	AR	P
11	5	Since it is most profitable for you to choose don't roll, whether I've chosen out or in, so I'll choose out to maximize my profit, however depending on your kindness I cannot judge whether you will choose roll or don't roll, obviously I would prefer if you would roll, thats why i'm just gonna ask you a silly question:) What song is better: (a) you'll never walkalone -elvis presley (b) american trilogy-elvis Presley (c) hurt -elvis presley (d) none (e) all of 'em. good luck:)	Your logic fails in the sense that I only lose 4. But we both gain 5 if we are in. On the song part of the question: (d) none of them, be more positive! 1 For the money 2 For the show. Lets rock!:)	NA	NP
11	6	Convince me to choose "IN". I don't trust you.	Youre a smart person. The msg you send me was the only one I was afraid for, otherwise I would have tried to screw you over. Were here to maximize our own profit so normally I would have chosen don't roll no matter what but thanks to your message I have to roll, i only lose 4€ you gain your expectation level will rise to 7€ (+1.50) if i trow i have good karma at this moment and i want to keep that so for that you can only believe this msg: I WILL ROLL. I have enough money but u have my word that i will role. no time to convince you, but i will do it thats a promise (with board games i am always lucky so i hope we work together and maximize our profits!	AP	P
11	7	Will you choose Roll when I play in? For you, the difference is only 4 euros, for me its 12 euros. On top of that, you will certainly get 10 euros when I choose in. Let's trust each other.	Okay, sounds good to me I will choose 'roll' and we both get a fair amount.	AR	P
11	8	Hey B, The best strategy for the both of us is In & Rolling 2–6 What do you think about it? How can I be sure that you are going to Roll? Because if I'm not I'll simply choose OUT. X.	Hey A,Yes, you are right, the best is IN and Rolling 2–6, even though you get 2 euros more than me but 10 is better than 5 for me, so yes I'll choose Roll.:) XX	AP	P
11	9	If I choose "IN", can I rely on you to choose "ROLL"? If so, I	no problem, payoff is better for me when you choose "IN"	AP	P

Table D.1 (*continued*)

Sess.	Pair ID	A message	B message	Ca	Cb
		will choose "IN" and we can maximize payoff. What is your answer?	anyway. =>		
11	10	Hey, as you know from the instructions I have 2 options: a safe- when we both get €5 or a risky one when I'm depending on you to choose Roll. Then you get sure €10. I believe that the second option is better for both of us, so I'll choose In if you choose Roll after that. Do we have a deal?	Yes, we have a deal!	AR	P
11	11	Good luck.	Haha thank you. Good luck to you too. I will not take advantage of your trust There isn't anything else to say I think	NA	NP
11	12	Are you going to choose "don't roll"?	No. I am going to roll the die.	AP	P
11	13	Hello, so I hope we can make an agreement that you choose ROLL and I choose IN. It's for me the highest chance of a good reward and for you a certain €10. If we can not make an agreement, safest for me is to choose OUT. So even though we have not met, I hope we can trust each other on this agreement:) Greetings.	You can trust on your proposal that I will choose to Roll.	AR	P
One-way message treatment					
3	1		Hey, I guess I have to ask you to trust me! I will roll the dice and then you'll have a 5/6 chance of getting €12, which is a good chance. For me it makes sense to roll the dice, cause if you choose out, then I'll make €5 either way. So, please choose in and lets both make some more money!		P
3	2		Hello A! I suggest we do the IN-ROLL-option. Then we have (probably) maximum profit: you €12 and I €10.		P
3	3		There is no reason to choose out. If you're in an I roll the dice, we can both make money. So I suggest we do that, and then we both will be happy.		P
3	4		I'll roll.		P
3	5		If you choose IN my payoff is 10 euro. Therefore I can choose ROLL and we both can be better off rather than having 5 euro only.		P
3	6		We are best off if you choose IN an I ROLL and the chances we get the money is 5 out of 6. Since I can get compensated for receiving less money on each turn if I roll the die and get a 1 I will choose to ROLL every time. This, I think is the only way we all together get the most out of this game. If you prefer to make sure it's all fair, choose OUT =)		P
3	7		I am willing to cooperate. (roll)		P
3	8		I PROMISE THAT IF YOU CHOOSE IN I WILL CHOOSE ROLL		P
3	9		BLANK		NP
3	10		Dear player A, I think that it is optimal for both of us that you choose 'IN'. I will choose 'roll' and we both end up with an expected value of euro €10∗. ∗(5/6 × 12 = 10). I know you are in a position to block this and go home with €5, but please trust me on this. I promise I will choose 'roll'. Regards, B		P
3	11		Let's choose option IN and Roll, then we have a chance of 5 out of 6 to earn a lot of money. Trust:)		P
3	12		I will choose ROLL		P
3	13		Hi, Here's my decision: I will choose ROLL all the time if you choose IN. Note that this is the only way to get the largest benefits. And it's fair cause your expected earning is 12 × 5/6 = 10, which is exactly the same as mine. So let's do it, OK? Look forward to cooperating with You!		P
5	1		Dear A, Gambling is everything I do. If you calculate it, the chances are better with Rolling to earn together more money. Greets, B		P
5	2		It's beneficial for both of us to work together. I won't stiff you, I'll take €10 over €5 any day It's up to you though		P
5	3		BLANK		NP
5	4		In and I Roll the dice		P
5	5		The mutual outcome is higher if I role the dice, so I will do that.		P
5	6		I will choose ROLL, so please choose IN. In this case we both get an expected payoff of €10. And that is the best results for us together.		P

(*continued on next page*)

Table D.1 (*continued*)

Sess.	Pair ID	A message	B message	Ca	Cb
5	7		I'm going to choose Roll, so if you choose IN you'll have 83% chance of receiving €12.		P
5	8		Choose IN and I will choose Roll. If you r lucky to get 2–6, then both of us will get higher payoff		P
12	1		BLANK		NP
12	2		BLANK		NP
12	3		Have fun:)		NP
12	4		I think we get the highest payoff if we cooperate. So choose IN and I will choose ROLL:)		P
12	5		It will be wise to always choose 'In', Then we will be beneficial by both.		NP
12	6		BLANK		NP
12	7		Cooperate for maximum outcome?		NP
12	8		I PROMISE TO ROLL THE DICE, I WANT US BOTH TO GET MOST OF THIS EXPERIMENT. I'M REALLY GOOD AT MONOPOLY, THERE'S A LOW CHANCE I GET 1:) Thanks. Player B		P
12	9		BLANK		NP

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