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Voluntary Participation Game Experiments with a Non-Excludable Public Good: Is Spitefulness a Source of Cooperation?[1]

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Abstract

Economic theory predicts that it is impossible to have cooperation in finitely repeated games such as a prisoners' dilemma game without communication. Yet experimental results follow a contradicting pattern: for example, cooperation is generally observed in public-goods experiments, at least in early rounds. This cooperation is often interpreted as kindness or fairness. In an experiment on a voluntary participation game with a non-excludable public good that is a version of a Hawk-Dove game, we observed that evolutionary stable strategies did not appear, but cooperation emerged through a transmutation from the Hawk-Dove game to a game where a dominant strategy outcome is Pareto efficient. We found that this transmutation is not due to kindness, but to *spitefulness* among subjects.

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1. Introduction

Economic theory usually predicts that it is impossible to have cooperation in finitely repeated games such as a prisoners' dilemma game without communication.[2] Yet experimental results follow a contradicting pattern: some cooperation is generally observed in public-goods experiments, for example, particularly in early rounds (see Ledyard, 1995). This cooperation is often interpreted as kindness or fairness. Andreoni (1995) confirmed that it comes from kindness or altruism of subjects. Most previous public goods experiments employ the voluntary contribution mechanism, in which each subject contributes some money to provide a public good so as to maximize her payoff or utility. A well-established theoretical result is that the Nash equilibrium outcomes of the voluntary contribution mechanism are not Pareto efficient.

Another line of experimental research in public goods is to investigate performance of mechanisms achieving Pareto efficient outcomes such as the Groves-Ledyard mechanism (1977). As Chen and Plott (1993) showed, the Groves-Ledyard mechanism works very well under some suitable punishment parameters.

Recently, Saijo and Yamato (1997, 1999) shed a new light on the meaning of voluntary participation in public goods provision mechanisms. Agents may have a choice not to participate in the mechanism proposed and hence some of them can free-ride on the benefit from a public good provided by others. In other words, most of the mechanisms designed so far -- including the voluntary contribution mechanism -- implicitly ignore non-excludability, which is one of the important features of a public good. Instead, designers assume that all agents must participate in the mechanism. Saijo and Yamato

[2] Many theorists have been trying to explain cooperation with finitely repeated games. A basic idea is to introduce some irrationality with or without complete information. See Radner (1980), Kreps, Milgrom and Wilson (1982), Benoit and Krishna (1985), and Conlon (1996).

(1997) proved an impossibility theorem demonstrating that no mechanism satisfying voluntary participation exists in very reasonable environments.[3]

This participation problem is important in many practical circumstances, such as for international treaties. For example, it took 24 years to reach agreement on the disposition of chemical weapons in the chemical weapons treaty, and the number of signatories was more than 160 by the end of 1995. The treaty is a mechanism creating a public good, i.e., a greater likelihood of world peace. The treaty requires that at least 65 signatories must ratify it in order to make it effective. In October 1996, Hungary was the 65th country to ratify it, and the treaty was effective after a half year. However, China and Russia have the most chemical weapons have not ratified this treaty. This could limit the treaty's effectiveness. Another example is the League of Nations. Following World War I President Woodrow Wilson strongly supported the League, but the U.S. Congress never ratified the Treaty of Versailles. Another more contemporary example is the Kyoto Protocol on climate change in 1997 to reduce greenhouse gas emissions. A large number of countries appear unwilling to participate in the provision of this obviously non-excludable public good.

Voluntary public goods provision by individuals -- such as for public broadcasting -- also faces this participation problem. For example, part of public broadcasting in Japan is supported by the public broadcasting fee. Every family must pay the fee by law, but many choose not to since enforcement is practically non-existent. A natural question to ask is what would happen if we allow voluntary participation in the voluntary contribution mechanism.

We conducted an experiment to study the voluntary contribution mechanism with voluntary participation in a two-stage game. In the first stage, two subjects choose

[3] See also Dixit and Olson (1997) for the voluntary participation problem in the context of the Coase theorem.

simultaneously whether or not they participate in the voluntary contribution mechanism. In the second stage, knowing the other subject's participation decision, subjects who selected participation in the first stage choose contributions to the public good. Subjects receive payoffs based on a Cobb-Douglas transformation of their consumption of the public good and their private good. The normal form game representation of the first stage participation decision is a Hawk-Dove game rather than the Prisoners' Dilemma game that represents the typical voluntary contributions mechanism with mandatory participation. As usual, this Hawk-Dove game has two pure strategy Nash equilibria and one mixed strategy Nash equilibrium which is the unique evolutionarily stable strategy (ESS) equilibrium.

We conducted two treatments. Both subjects were required to participate in the voluntary contribution mechanism in the control Treatment A. Each subject could choose her participation decision before her contribution decision in Treatment B. Thus, Treatment A only included the second stage, while Treatment B included both stages. Each treatment had twenty subjects and each subject was randomly paired with each other subject one at a time – a so-called "strangers" design. The same game was repeated 19 rounds, 4 for practice and 15 for monetary reward, so as not to pair the same two subjects more than once.

In Treatment A, subjects on average contributed (or "invested") close to the Nash equilibrium level, although some subjects exhibited *spiteful* behavior. A spiteful subject explicitly stated on her record sheet that she chose an investment number less than the Nash equilibrium investment so as to reduce her opponent's payoff more than her own payoff reduction.[4]

[4] Saijo and Nakamura (1995) observed spiteful behavior in a traditional voluntary contribution mechanism experiment. See also Ito, Saijo, and Une (1995). Spiteful behavior is also observed in biology. Iwasa,

In Treatment B, the participation rate rose as rounds advanced, and the average investment in the final rounds in Treatment B was very close to that in Treatment A. Consequently, in the final two-thirds of Treatment B, subjects' participation rate nearly always exceeded the ESS participation rate. A typical subject behaved as follows: at the beginning she did not participate in the mechanism, expecting high payoff with free-riding. However, her opponent who decided to participate in the mechanism did not invest the number that maximized his own payoff. Rather, he invested a smaller amount so as to reduce his opponent's payoff more than his own payoff reduction. The non-participating subject thus learned that non-participation was not beneficial to her and hence she began regularly participating in the mechanism. That is, it seemed that the source of cooperation was not altruism or kindness but was a payoff-maximizing response to the *spiteful* behavior of other subjects. What we call cooperation here means that both subjects participate in the mechanism.

The remainder of the paper is organized as follows. In Section 2 we explain the voluntary contribution mechanisms with and without voluntary participation. Section 3 describes the experimental design. We present the results on the experiment of the voluntary contribution mechanism without voluntary participation in Section 4 and those on the experiment of the voluntary contribution mechanism with voluntary participation in Section 5. Section 6 concludes.

2. The Voluntary Contribution Mechanism

We employ the voluntary contribution mechanism with or without voluntary participation as our model.

Nakamaru, and Levin (1998) set up a model explaining spiteful behavior of colicin-producing bacteria against colicin-sensitive bacteria.

There are two subjects, *a* and *b*, and subject *i* (=*a*,*b*) has w_i units of initial endowment of a private good. Each subject faces a decision of splitting w_i between her own consumption of the private good (x_i) and investment (y_i). From the investment, each subject receives $y = y_a + y_b + w_y$, where w_y is the initial level of the pubic good. That is, the level of the public good is the sum of the investments of two subjects and the initial level of the public good. Therefore, each subject's decision problem is

$$\max u_i(x_i, y) \text{ subject to } x_i + y_i = w_i,$$

where $u_i(x_i, y)$ is subject *i*'s payoff function. We use a Cobb-Douglas type payoff function to transform contributions and the private good into subject payoffs, and all subjects have the same payoff function. That is, $u_i(x_i, y) = x_i^{\alpha} y^{1-\alpha}$, where $\alpha \in (0,1)$. Using a monotonic transformation, we specify the payoff function as follows:

(1) $$u_i(x_i, y) = \frac{\{x_i^{\alpha} y^{1-\alpha}\}^{\beta}}{50} + 500 .$$

In our experiment we set $(w_a, w_b, w_y) = (24,24,3)$, $\alpha = 0.47$, and $\beta = 4.45$. With these parameters the Nash equilibrium investment pair of the voluntary contribution mechanism is $(\hat{y}_a, \hat{y}_b) = (7.69,\ 7.69)$ and the payoff is $u_i(\hat{x}_i, \hat{y}) = 7089$, where $\hat{x}_i = 24 - 7.69 = 16.31$ and $\hat{y} = \hat{y}_a + \hat{y}_b + w_y = 18.38$. The Pareto efficient level of the public good is determined uniquely by the Samuelson condition and the feasibility condition. Its symmetric contribution level is 12.02. Therefore, the Pareto efficient level of the public good is 27.04=12.02+12.02+3. Clearly, the level of the public good with the voluntary contribution mechanism is less than the Pareto efficient level of the public good.

So far we have assumed implicitly that subjects must participate in the voluntary contribution mechanism. Saijo and Yamato (1997) found that there is a wide class of mechanisms with public goods where subjects have incentives not to participate. The voluntary contribution mechanism is one of them. That is, the voluntary contribution mechanism is not *voluntary* from the viewpoint of participation incentives.

Consider now a two-stage game (see Figure 1). In the first stage, each subject simultaneously decides whether or not she should participate in the voluntary contribution mechanism without knowing the other subject's decision. In the second stage, each subject decides how many units of her initial endowment she should invest after knowing the other subject's participation decision.

Figure 1 is around here

Notice that non-participation is different from zero investment with participation. Once subject *a* decides to participate in the mechanism, subject *b* must take account of this fact when she chooses her investment number *without* knowing subject *a*'s investment number. On the other hand, if subject *a* chooses non-participation, then subject *b* knows that subject *a* invests nothing.

In our experiment, subjects choose integer investment numbers only. If both subjects decide to participate in the mechanism, then the Nash equilibrium of that subgame is for each subject to contribute 8 and obtain a payoff of 7345. No other Nash equilibria sneak into our model due to the discrete strategy choice set. If one subject participates in the mechanism and the other does not, then the participant maximizes her payoff at $y_i = 11$ and obtains a payoff of 2658, and the non-participant clearly invests nothing and obtains a payoff of 8278. If both choose not to participate in the mechanism,

both subjects end up with a payoff of 706. These payoffs are summarized in the normal form game payoff table shown in Table 1.

Table 1 is around here

The game in Table 1 is a well-known Hawk-Dove game. Although the usual simplification of the public good problem is a Prisoners' Dilemma game, we find that the proper simplification is a Hawk-Dove game when we allow participation in the mechanism as a choice variable. There are two pure strategy Nash equilibria: either one of subjects participates in the mechanism. One more Nash equilibrium is a mixed strategy equilibrium: each subject *i* chooses 0.68 as her participation probability p_i. Among these three equilibria, the mixed strategy equilibrium is a unique ESS equilibrium.[5]

3. Experimental Design

Our experiment consisted of three treatments, A, B, and B′. Treatment A corresponded to the voluntary contribution mechanism without voluntary participation and Treatments B and B′ corresponded to the voluntary contribution mechanism with voluntary participation. We will explain the difference between Treatment B and Treatment B′ below.

We conducted one session in Treatment A and one session in Treatment B at the University of Tsukuba during December of 1995, and one session in Treatment B and one session in Treatment B′ at the Tokyo Metropolitan University during December of 1997. We recruited twenty students for each session by campus-wide advertisement. These students were told that there would be an opportunity to earn money in a research

[5] See Maynard Smith (1982).

experiment. None of them had prior experience in a public good provision experiment. No subject attended in more than one session. The Treatment A session required approximately 90 minutes and the Treatment B and B′ sessions required approximately two hours to complete. The mean payoff per subject was $26.31 ($1=100 yen). The maximum payoff among the eighty subjects was $36.25, and the minimum payoff was $17.28.

Let us describe Treatment A first. Twenty subjects seated at desks in a relatively large room had identification numbers between one to twenty randomly. These identification numbers were not publicly displayed, however, so subjects could not determine who had which number. We made ten pairs out of twenty subjects. In each round, ten pairs played the game without the participation decision as described in the previous section. The pairings were determined in advance by experimenters so as not to pair the same two subjects more than once. The first four rounds were for practice and the remaining fifteen determined the subjects' monetary payoffs. Each subject received an experimental procedure sheet, a record sheet, payoff tables, 15 investment sheets, and 4 practice investment sheets.[6] Instructions were given by tape recorder to minimize the interaction between subjects and experimenters. Each subject determined her investment from an integer number between 0 and 24 by using payoff tables and then marked a number on an investment sheet. Experimenters collected these investment sheets and then redistributed them to the paired subjects. During the redistribution, subjects were asked to fill out the reasons why they chose these numbers. After the redistribution, subjects calculated their payoffs from the payoff tables. Then the next round started.

[6] The use of practice periods permits subjects to send signals costlessly prior to the paid rounds. However, subjects interacted with each other in only one period and there was no public information after the instructions were completed and data collection began. Therefore, the impact of these signals is somewhat limited. Nevertheless, see footnote 14 for some minor evidence of spillover from the practice periods.

Treatment B had one additional step. Before choosing investment numbers, subjects decided whether or not they would participate in the voluntary contribution mechanism. These decisions were collected by experimenters and then redistributed to their paired subjects. After this procedure, subjects who decided to participate in the mechanism chose their investment numbers.

Treatment B′ is exactly the same as Treatment B except what term was used to describe the person that each subject is matched with at each period. The term "your opponent" was employed in the instructions, record sheets and payoff tables for both Treatment A and Treatment B. The phrase "the person you are paired with" replaced "your opponent" in all materials of Treatment B′. One might say that the term "opponent" forces subjects to think in relative terms. However, there was no essential difference between the results for Treatment B and those for Treatment B′, as we document below.

Every subject had the same payoff function and every subject knew this fact. We distributed three kinds of payoff tables to avoid any possible misunderstanding. The payoff tables used in Treatments A and B are Tables 2, 3, and 4. Table 2 is a detailed payoff table: the rows are for the subject's own investment numbers and the columns are for the other subject's investment numbers. Table 3 is a rough payoff table and Table 4 has an iso-payoff map. The payoff tables distributed in Treatment B′ are the same as Tables 2, 3, and 4 except that the term "your opponent" is replaced by the term "the person you are paired with".

We allowed subjects three minutes to examine the three payoff tables before the practice rounds and ten minutes to examine the three new payoff tables before the real rounds. The tables used for practice and real rounds were different.

Tables 2, 3 and 4 are around here

We declared that the experiment would be stopped if communication among the subjects was observed. This never happened.

4. Experimental Results for Treatment A

Treatment A was a control treatment intended to permit a comparison between mandatory participation and voluntary participation.

The Nash equilibrium investment pair was (8, 8) from Table 2, and no other Nash equilibrium exists. Since each round had 10 pairs and 15 rounds were conducted, we have 150 pairs of data. The order of investment numbers does not matter, so we rearranged each pair (x,y) with $x \geq y$. Figure 2 shows the frequency distribution of investment data. The maximum frequency pair was (8, 8) with 36 pairs, the second was (8, 7) with 35 pairs, the third was (8,6) with 14 pairs, and the fourth was (7, 7) with 11 pairs. The average investment across all subjects was 7.24.

Figure 2 is around here

Figure 3 shows the average investment pattern from round 1 to 15. The average investment was less than the Nash equilibrium level of investment (8) in all but one round. In order to understand why this happened, we checked the record sheets and questionnaire sheets of subjects. The record sheet was not only for keeping the investment record but also for specifying the reasons why a subject chose her investment numbers. We found four subjects who explicitly stated the following reasoning: they estimated that their opponent would chose 8, and then they chose 6 or 7 explicitly because this would make their opponent's payoff much lower than their own payoff. For example,

consider the case that subject *a* chooses 7 and subject *b* chooses 8. Then subject *a* obtains 7340, and subject *b* obtains 6526. At the Nash equilibrium (8, 8), both subjects obtain 7345. From the viewpoint of subject *a*, the reduction of 5 units of payoff is minor, but subject *a* can make the reduction of subject *b*'s payoff (819) much greater than his own reduction.[7, 8] We label these subjects as *spiteful* subjects, and Figure 3 also presents mean investments after excluding those subjects.

Figure 3 is around here

We tested the hypothesis that mean investment equals the Nash equilibrium investment (8) first by pooling investments across rounds. Because each subject made 15 investment choices the data are clearly not independent. Therefore, we accounted for the panel nature of the data using a random effects error specification $v_{it} = e_i + \varepsilon_{it}$, where e_i is a subject-specific error term and ε_{it} is an iid error. The pooled data strongly reject the Nash equilibrium (t=3.28), and also reject the Nash equilibrium when spiteful subjects are excluded (t=4.45) and when spiteful subjects and their opponents' data are excluded (t=3.75). We then focused on round by round tests of the Nash equilibrium. Without excluding any data, a nonparametric Wilcoxon signed rank test rejects the Nash equilibrium hypothesis in ten out of fifteen rounds at the five percent significance level. Excluding spiteful subjects' data, this test rejects the Nash equilibrium hypothesis in five out of fifteen rounds. Finally, excluding spiteful subjects' and their opponents' data, this test rejects the Nash equilibrium hypothesis in four out of fifteen rounds. Nevertheless,

[7] Akerlof and Yellen (1985a, 1985b) observed similar phenomena in Keynesian business cycles and industrial organization theory. A small amount of nonmaximizing behavior may cause some amount of changes at equilibrium that is larger in its magnitude than the losses due to nonmaximizing agents.
[8] Note that this spiteful (non-maximizing) behavior would not be observed in a usual two-by-two game. In our experimental setting, subjects can choose a slight deviation from an optimal investment strategy. That is, the two-by-two game approach is not rich enough to capture economic implications in public goods environments.

the fact that many subjects chose the Nash equilibrium investment indicates that at least economically the Nash equilibrium has attracting power for the data.[9]

These Treatment A results lead to the following observation.

Observation 1:

The mean investment across all rounds is significantly less than the Nash equilibrium investment, regardless of whether spiteful subjects' data are excluded. Overall, mean investments were approximately ten percent below the Nash equilibrium.

5. Experimental Results for Treatments B and B′

The session in Treatment B conducted at the University of Tsukuba, the session in Treatment B at the Tokyo Metropolitan University, and the session in Treatment B′ at the Tokyo Metropolitan University are called the Tsukuba B session, Tokyo B session, and Tokyo B' session, respectively. As shown in the appendix, the data from these three sessions are statistically indistinguishable in virtually all cases. This provides strong evidence that neither the experiment site (Tokyo versus Tsukuba) nor the experiment wording ("your opponent" versus "the person you are paired with") affect choices. Therefore, in the subsequent analysis we pool the data across the three Treatment B sessions, i.e., Tsukuba B, Tokyo B, and Tokyo B' sessions.

5.1 Investment Data

[9] This result is similar to Andreoni (1993) and Chan et al. (1998), who study the crowding out hypothesis in public good experiments with an interior Nash equilibrium and minimum contribution "taxes" in some treatments. In both of these previous experiments contributions were close to but slightly below the Nash equilibrium prediction when no tax was imposed.

Figure 4 shows that the distribution of investment pairs in Treatment B are very different from that of Treatment A (Figure 2). The maximum frequency pair was (8,7) with 57 pairs, the second was (11,0) with 44 pairs, followed by (8,8) and (0,0) with 37 pairs each.

Figure 4 is around here

Also unlike Treatment A, the average investment (including the investments of zero by nonparticipants) changed across rounds in Treatment B. Figure 5 illustrates that the average investment in Treatment B was clearly less than in Treatment A, but the average investment in Treatment B ascended across rounds. In the late rounds the average investments in the two Treatments were very similar; for example, in the final round the average investments in Treatments A and B were 7.0 and 6.47 respectively. The average investments were not significantly different by round between Treatments A and B after round 4, according to the nonparametric two-sample Wilcoxon rank sum test.

Figure 5 is around here

Using a random-effects panel data model that is the same as that for Treatment A, we tested the hypothesis that mean investment equals the Nash equilibrium investment (8) in the case of both participating. The mean investment in this case was too low (7.26), and we rejected the hypothesis (t=4.21).[10] However, like the result for Treatment A, a substantial number of subjects selected the Nash equilibrium, so the Nash equilibrium is meaningful at least economically in the case of both participating.

[10] For those who prefer nonparametric tests, we also conducted Wilcoxon signed rank tests separately for each of the 15 periods. This test rejects the null hypothesis that average investment equals 8 at the five percent level in 12 of the 15 periods.

5.2 Participation Data

We next examined whether the participation data in Treatment B were compatible with the mixed strategy equilibrium of the Hawk-Dove game described in Table 1. The null hypothesis is the ESS participation probability of 0.68. We first conducted a binomial test separately by round in order to avoid pooling dependent participation decisions made by the same subject in the same test. Under the ESS null hypothesis, the probability of observing 10 non-participation decisions or less out of 60 is less than one percent, and the probability of observing 12 non-participation decisions or less out of 60 is less than five percent. As Figure 6 shows, the participation rate rose as rounds advanced (although a brief decline was observed in rounds 8 and 9). The smooth curve is a simple log-linear regression. More to the point for this binomial test, the low non-participation rate permits the binomial test to reject the ESS null hypothesis in 9 rounds of the 15 total rounds (in rounds 5, 6, 7, 10, 11, 12, 13, 14, and 15) at the five percent (usually one percent) significance level.

Figure 6 is around here

We also examined the overall participation rates for each of 60 subjects separately. The mean participation rate was 80% (12 of 15 decisions), and the median participation rate was 86.7% (13 of 15 decisions). Note that the ESS rate of 0.68 implies on average slightly more than 10 participation decisions. Only 14 of the 60 subjects (23.3%) participated 10 times or less, while the other 46 subjects (76.6%) participated 11 times or more. 15 of the 60 subjects (25%) were apparently using a pure strategy, as they participated in 15 out of 15 periods. Using the 60 separate subject observations, the data

reject the ESS prediction of 0.68 at better than the 0.0001 significance level using the non-parametric Wilcoxon signed-rank test.

Furthermore, we conducted a binomial test of the mixed strategy of $p = 0.68$ separately for each subject. Under the null hypothesis that subjects play this mixed strategy, participation decisions--even for an individual subject--are statistically independent. At the five percent significance threshold, 23 of 60 subjects (38.3%) participated too much (either 14 or 15 times), rejecting $p = 0.68$; 6 of 60 subjects (10%) participated too little (7 times or less), rejecting $p = 0.68$ in the other direction. At the ten percent significance threshold, 32 of 60 subjects (53.3%) participated too much (13, 14 or 15 times), rejecting $p = 0.68$; 9 of 60 subjects (15%) participated too little (8 times or less), rejecting $p = 0.68$ in the other direction.

5.3 Why were Participation Ratios High?

In order to understand these rather high participation ratios, consider the case in which only one subject in a pair participated in the voluntary contribution mechanism. When a subject did not participate in the mechanism, the other could obtain her maximum units of payoff by investing 11 (see Table 2). There were 139 observations with exactly one participant. In these cases the participant invested eleven 43 times, invested less than eleven 95 times (zero 17 times, invested one 3 times, invested two 7 times, invested three 8 times, invested four 7 times, invested five 1 times, invested six 16 times, invested seven 19 times, invested eight 9 times, invested nine 6 times, and invested ten 2 times), and invested more than eleven (twenty-four) only 1 time. In fact, the mean investment (6.90) was lower than when both subjects participated! Using a random effects

model, we soundly reject the hypothesis that mean investment equals 11 in the case of one participant (t=8.14).[11]

As shown in Table 2, by investing 11 in response to the other not participating, the non-participating subject earns 8278 while the participating subject earns 2658. On the other hand, by investing 7 in this situation, the non-participating subject earns 4018 while the participating subject earns 2210. That is, the reduction of the participant's payoff (448=2658-2210) was relatively small, while the reduction of the non-participant's payoff (4269=8278-4018) was relatively large. This appears to be stronger evidence of spiteful-like behavior than we observed in Treatment A. The "spite rate", which is the ratio of the number of participants investing less than 11 to the number of observations with a single participant, is equal to 95/139 = 68%.

One might say that in the two-stage game of Treatment B, the low investment by the single participant could be interpreted as belonging to a tit-for-tat strategy to "teach" others to cooperate. Because subjects were re-paired with a new opponent each period and never interacted with the same subject in more than one period, however, such a strategy is not subgame perfect. Furthermore, although there is no need to take a tit-for-tat strategy at the final period of the experiment, the spite rate of the final period is equal to 6/9 = 67 percent.[12]

Our interpretation that this behavior is spiteful hinges on the low contributions made by subjects when they are the only participant. An alternative interpretation of altruism is also consistent with our finding that the participation rate exceeds the ESS prediction; altruistic subjects should always participate. Altruists, however, should also

[11] The nonparametric Wilcoxon test rejects the null hypothesis that average investment equals 11 at the five percent level in 9 of the 15 periods, even though the average sample size per period is only about 9 because of the high participation rate.

[12] The full distribution of the 9 final period observations with exactly one participant is as follows: one participant invested two, one participant invested seven, three participants invested eight, one participant invested nine, and three participants invested eleven.

invest as least as much as the level that maximizes their own earnings—which is 11 in the case of a single participant—if not more, since the non-participant's earnings strictly increase in the participant's investment (see Table 2). Therefore, choices below 11 are inconsistent with pure altruism. These choices could, however, be consistent with notions of "inequality aversion" or reciprocal altruism advanced recently by some researchers (for example, see Fehr and Schmidt (1999) and Levine (1998)). What we refer to as spite in this context is a response to the nonparticipation of one's opponent, so it is a form of (negative) reciprocity.[13]

Figure 7 is around here

Figure 7 shows average payoffs by round depending on participation. Curve α denotes the average payoffs when both subjects participated in the mechanism. As Table 1 shows, the payoff should be 7345 according to the Nash equilibrium prediction, but actual data showed that average payoffs were less than 7000 units in all 15 rounds. Curve β denotes the average payoffs when only the other participated in the mechanism. According to the Nash equilibrium, this should lead to 8278 units of payoff, but actual payoffs were less than 6000 in 12 of 15 rounds. According to Table 1, curve β should be above curve α, but Figure 9 shows that curve α was above curve β in all but round 9. That is, participation became a dominant strategy even in early rounds, as illustrated in Table 5.

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[13] This is different from simple rivalistic behavior in which a subject seeks merely to earn more than his opponent earns. The data are inconsistent with such rivalistic motivations, because such motivations are more likely to lead to *less* participation than the ESS prediction since nonparticipation guarantees payoffs greater than or equal to those of the opponent. It is also unlikely that rivalistic choices would be so close to the Nash equilibrium when both subjects participate because rivalistic subjects have a strong incentive to reduce their public good investment.

Table 5 is around here

Our interpretation of this conversion to the dominant strategy game is based on subject learning and proceeds roughly as follows. After inspection of the payoff tables, some subjects initially do not participate in the mechanism hoping the other will participate and invest 11. They therefore expect (perhaps with the ESS probability of 0.68) to receive a payoff of 8278. However, since their participating opponent invested less than 11, the subject realized that her earnings in this subgame fell below 6000 on average. After learning this, she chose to participate in the mechanism in later rounds and frequently earned more than 6000.[14]

5.4 Learning Processes for Participation

Essentially, subjects learn (contrary to the ESS equilibrium) that expected profits from participation tend to exceed those from non-participation. In this final subsection we provide a simple model of this learning process. Many alternative approaches to learning have been advanced recently in the literature, including reinforcement learning (e.g., Erev and Roth, 1998), belief-based learning, and creative hybrid approaches (e.g., Camerer and Ho, 1999). Rather than provide an exhaustive evaluation of the various learning models

[14] As Figure 9 in the appendix shows, the average participation rates at early rounds in the Tokyo B session were relatively high. To see why this happened, we looked at the record sheets for the four practice periods, since the experiences of subjects in the practice periods might affect their participation decisions in the actual experiment. We found that spiteful behavior during the practice periods would lead to high participation rates in early periods. First of all, we counted the number of subjects who explicitly wrote that they realized that non-participation was not beneficial because the participant would act spitefully in the practice periods. This number in the Tokyo B session (8) was much larger than both that in the Tokyo B' session (1) and that in the Tsukuba B session (1). We also calculated the number of subjects who had no chance to experience spiteful behavior in the practice periods. Consider a subject who experienced the following: (a) no cases in which only one subject participated, or (b) if only one subject participated (either himself or his opponent), the payoff-maximizing (non-spiteful) investment was selected. Call such a subject a "spite-free" subject. The number of spite-free subjects in the Tokyo B session was 5, the number in the Tokyo B' session was 8, and at the number in the Tsukuba B session was 11. As the number of spite-free subjects was larger, the participation rate at period 1 was smaller.

using our data, we simply report results of an adaptive, reinforcement-based learning model. In particular, we estimate a probit model in which the probability of participation depends on the ratio of expected participation earnings (EPE) to expected non-participation earnings (ENE):

(2) $$\text{Probability(Participation)} = f(\text{EPE}/\text{ENE})$$

The next step is to specify the process underlying subjects' expectations. We use two polar cases for this simple model: (1) Cournot (or myopic) expectations and (2) Fictitious Play expectations (e.g., Cheung and Friedman, 1997; Cox and Walker, 1998).

According to Cournot, EPE are simply the realized earnings the last time the subject participated; and ENE are simply the realized earnings the last time the subject did not participate. In other words, subjects maintain a very short (myopic) memory length--of one observation for each (participate or not) decision. By contrast, according to Fictitious Play, subjects have a long memory, and each observation updates the expectation with a declining weight. For example, if a subject has participated N times up to this round, and they participated in this round, they update EPE as follows:

(3) $$\text{EPE}=((N*\text{previous EPE})+\text{current participation earnings})/(N+1).$$

In other words, as subjects accumulate evidence they simply include it in their running average of the payoffs from participation for EPE. ENE is, of course, analogous.[15]

[15] For both Cournot and Fictitious Play, we need the expectations to start somewhere when no evidence has yet accumulated. For these initial expectations we employ the ESS expected payoffs, which are 5829 for both EPE and ENE. Therefore, the EPE/ENE ratio is 1 in round 1.

The empirical model is probit maximum likelihood, with a random subject effect. Table 6 presents the estimation results separately and pooled for the three Treatment B sessions. For Fictitious Play, the expected payoff ratio is insignificantly different from zero except in the Tokyo B session, where the coefficient estimate has the wrong sign. For the Cournot specification, the ratio is significantly positive except in the Tokyo B session. The positive coefficient on the ratio implies that as the relative profitability of participation increases, the likelihood of participation increases. So, we can conclude that (1) subjects' participation decisions respond to their experience, and (2) subjects appear to update their expectations in this environment using a short (Cournot) memory length.

Table 6 is around here

Summarizing the above observations, we have the following.

Observation 2:

(*a*)*The ESS prediction regarding the participation ratio is rejected.*

(*b*) *The participation ratio rises as rounds advanced and the average investment in the final two-thirds of Treatment B is not significantly different from that in Treatment A.*

(*c*) *It seems that the source of cooperation is not altruism or kindness but is spiteful behavior of subjects. Subjects learn that non-participation will invoke a spiteful response, which reduces the payoff of non-participation below the payoff of participation. This converts participation into a dominant strategy.*

6. Concluding Remarks

We found that the ESS prediction in a Hawk-Dove game was rejected and some cooperation among subjects emerged across time. Furthermore, this cooperation did not

come from altruism or kindness among subjects, but from an optimal response to other subjects' *spiteful* behavior. Acting spitefully in this way is costly, and this kind of spiteful or negative reciprocal behavior has also been observed recently by independent research on public goods (Fehr and Gachter, 1998) and in the ultimatum game (Ochs and Roth, 1989 and Prasnikar and Roth, 1992).

In neo-classical economic theory, it is assumed that each agent cares only about himself and maximizes his own payoff subject to some constraints. If people care about how they are doing relative to others (for example, see Hume, 1739),[16] however, then it is natural to think that they might often take *spiteful* actions in an attempt to decrease the happiness of others. One would think that such spiteful behavior might result in outcomes that are socially inferior to outcomes arising from the interaction of purely selfish individuals. We find that the opposite may occur: spitefulness leads to greater cooperation. This finding suggests a need to rethink our fundamental assumptions of human nature underlying our models.

In our experiment, each subject knew that every subject had the same payoff table. This might trigger spiteful behavior since every subject could understand opponent's payoff structure. In future experiments we plan to conduct a systematic exploration of this information effect. It is also possible that spiteful behavior is more likely in two-person games such as this because it encourages relative payoff comparison. Future experiments can test this conjecture using larger groups. We also leave for future research a comparison of American subjects to these Japanese subjects in the present environment. If the propensity for spiteful behavior differs across cultures, outcomes could be

[16] "Now as we seldom judge of objects from their intrinsic value, but form our notions of them from a comparison with other objects; it follows, that according as we observe a greater or less share of happiness or misery in others, we must make an estimate of our own, and feel a consequent pain or pleasure. The misery of another gives us a more lively idea of our happiness, and his happiness of our misery. The former, therefore, produces delight; and the latter uneasiness." (David Hume, 1739)

substantially different for these two subject pools. Finally, the ESS participation rate in the present experiment was 0.68. We are currently conducting experiments in which the ratio is less than 0.5.

APPENDIX: Comparisons of Tsukuba B, Tokyo B, and Tokyo B′ Sessions

First of all, we compare investments conditional on participation across the three B and B′ sessions. Figure 8 illustrates how the average investment conditional on participation, which equals the sum of investment numbers for participants divided by the number of participants, changed from round 1 to 15 for each of the three B and B′ sessions. The average investments conditional on participation were different in only a handful of periods according to the nonparametric Wilcoxon rank sum test. In 14 of the 15 periods there is no statistical difference between the Tokyo B and Tokyo B′ sessions at the five percent significance level, which indicates that the "opponent" wording did not affect investments conditional on participation.[17] Likewise, the Tokyo B and Tsukuba B sessions are not statistically different in 12 of the 15 periods, indicating that investments conditional on participation differed very little across sites.[18]

Figure 8 is around here

Figure 9 illustrates the average participation rate patterns from round 1 to 15 in Tsukuba B session, Tokyo B session, and Tokyo B′ session. There are some statistically significant differences in the participation rates between the Tsukuba B and Tokyo B

[17] In period 8 the average investment in the Tokyo B′ session was significantly higher than in the Tokyo B session.
[18] The average investment was significantly higher in the Tsukuba B session in periods 1, 9 and 13.

sessions in periods 1 and 2.[19] After period 2, there are basically no systematic differences among the participation rates across sessions.[20]

Figure 9 is around here

Overall, we conclude that there are virtually no statistically significant differences in the data based on the experiment site or the experiment wording.

[19] Fisher's exact test *p*-values for the Tokyo B versus Tsukuba B comparison are 0.022 in period 1 and 0.020 in period 2. We discuss the reasons for these differences in footnote 12. Fisher's exact test uses the hypergeometric probability distribution to calculate the exact probability of observing the distribution of participation rates (and those more unequally distributed) under the null hypothesis of no differences in rates across treatments.

[20] In period 5 the participation rate is significantly higher in the Tokyo B′ session than in the Tokyo B session, but in period 10 the participation rate is significantly lower in the Tokyo B′ session than in the Tokyo B session.

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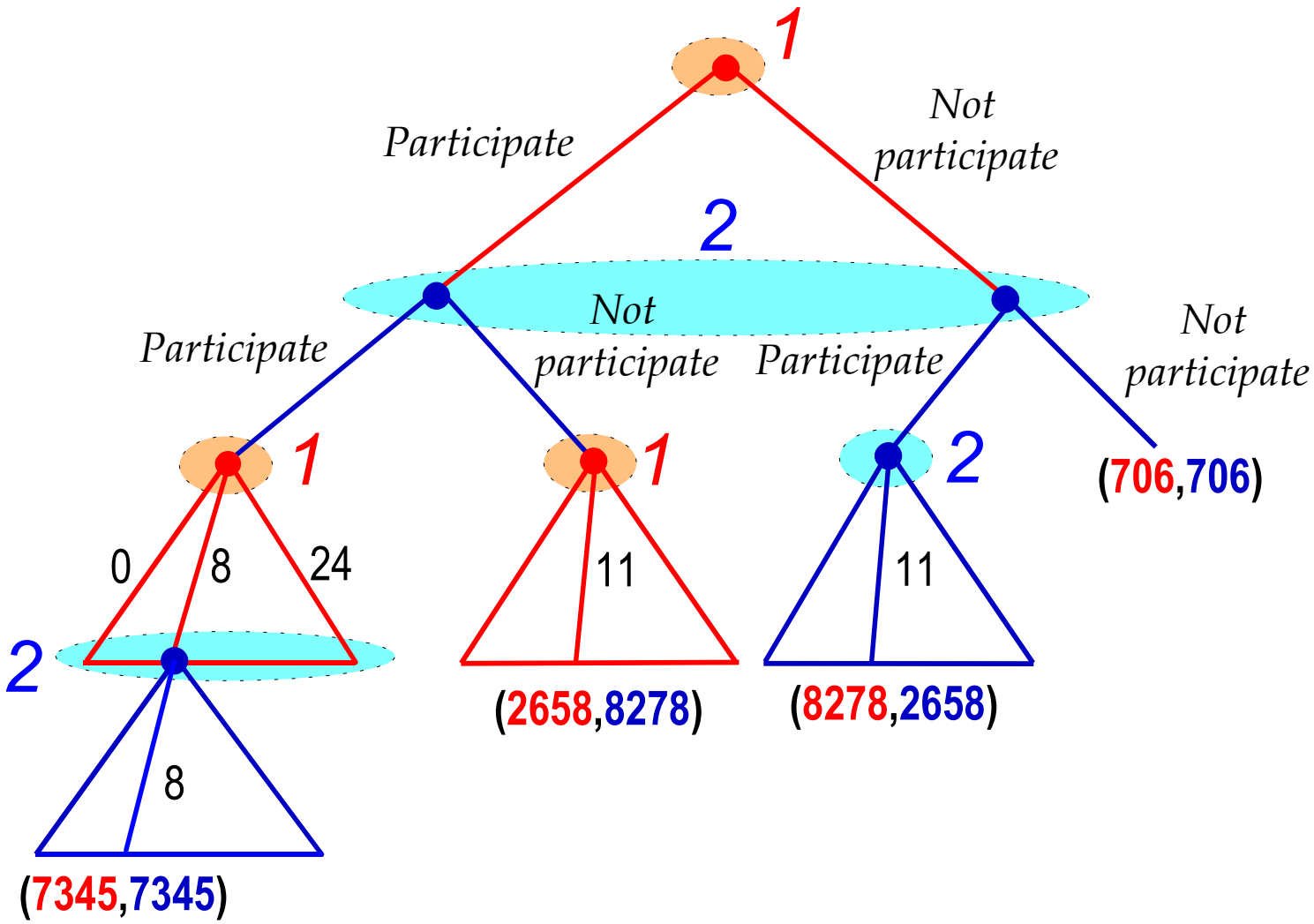
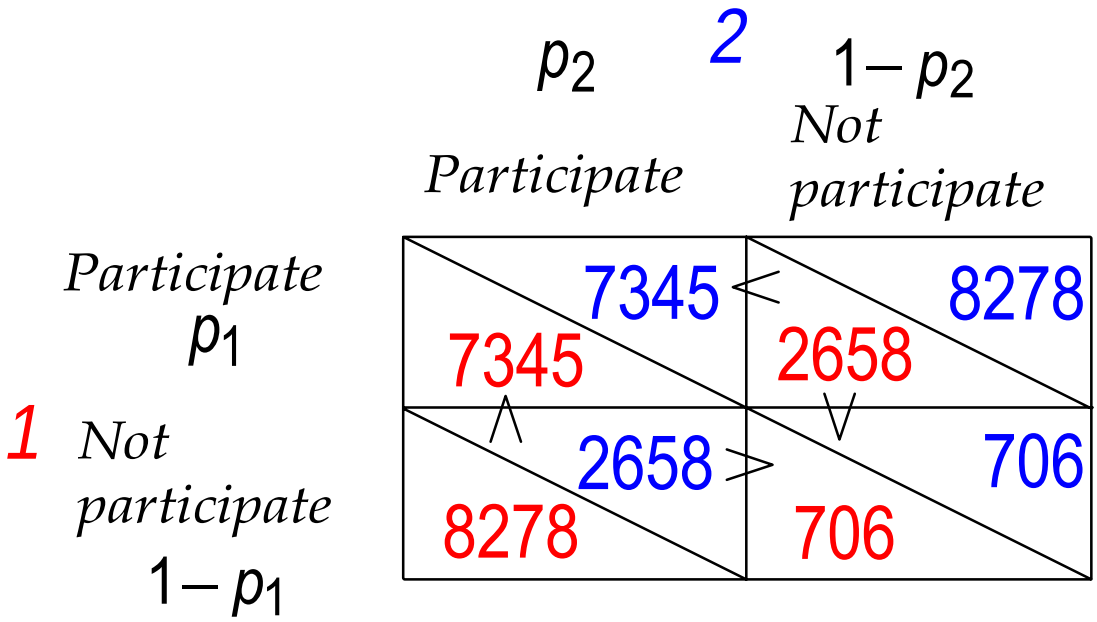


Figure 1. The game tree when subjects can choose their participation in the voluntary contribution mechanism.



Nash equilbrium:

$$(p_1, p_2) = (1,0),(0,1),(0.68,0.68)$$

Evolutionarily stable strategy, ESS:

$$p_i = 0.68$$

Table 1. The payoff table becomes a Hawk-Dove game.

Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	706	871	1072	1297	1536	1775	2003	2210	2386	2523	2615	2658	2648	2585	2470	2309	2106	1871	1614	1349	1091	858	669	543	500
1	905	1127	1379	1647	1919	2183	2427	2641	2816	2944	3019	3039	3001	2905	2755	2555	2313	2038	1743	1443	1154	894	685	548	500
2	1186	1465	1764	2072	2374	2658	2913	3129	3297	3411	3465	3456	3385	3252	3061	2819	2534	2217	1881	1543	1220	933	703	552	500
3	1554	1888	2232	2575	2902	3202	3463	3675	3831	3925	3952	3911	3801	3626	3391	3102	2770	2406	2027	1648	1290	973	721	556	500
4	2017	2401	2787	3160	3508	3817	4078	4281	4420	4488	4483	4403	4250	4028	3743	3404	3020	2608	2181	1759	1363	1015	740	561	500
5	2578	3010	3432	3831	4193	4507	4762	4950	5064	5101	5057	4934	4733	4459	4119	3725	3287	2821	2344	1877	1441	1060	760	566	500
6	3244	3718	4171	4590	4960	5272	5515	5681	5766	5765	5677	5504	5249	4918	4519	4065	3568	3045	2516	2000	1522	1106	781	571	500
7	4018	4529	5008	5440	5812	6115	6339	6478	6526	6481	6343	6114	5800	5406	4944	4425	3866	3282	2696	2129	1607	1155	802	576	500
8	4904	5447	5944	6383	6751	7038	7237	7340	7345	7250	7056	6765	6385	5924	5393	4806	4179	3532	2886	2265	1696	1206	825	582	500
9	5907	6475	6984	7422	7779	8043	8209	8271	8225	8073	7816	7458	7007	6472	5867	5207	4508	3793	3084	2407	1789	1259	849	588	500
10	7031	7616	8130	8561	8897	9132	9257	9270	9168	8951	8624	8193	7664	7051	6367	5628	4854	4067	3292	2555	1886	1315	874	594	500
11	8278	8873	9384	9800	10109	10306	10384	10339	10173	9886	9482	8970	8359	7661	6892	6070	5217	4354	3509	2710	1987	1372	899	600	500
12	9653	10250	10750	11142	11416	11567	11589	11480	11242	10877	10390	9791	9090	8302	7444	6534	5596	4654	3736	2871	2092	1432	926	606	500
13	11158	11749	12229	12589	12820	12916	12875	12694	12376	11925	11349	10656	9860	8976	8022	7019	5992	4967	3972	3039	2201	1494	953	613	500
14	12796	13372	13824	14144	14323	14356	14243	13982	13576	13033	12358	11565	10667	9681	8627	7526	6406	5292	4217	3213	2315	1559	982	620	500
15	14570	15123	15538	15808	15925	15888	15694	15344	14844	14199	13420	12520	11514	10419	9258	8055	6836	5631	4473	3394	2433	1626	1012	627	500
16	16484	17003	17372	17583	17630	17513	17229	16783	16179	15426	14535	13521	12399	11191	9918	8606	7285	5984	4738	3582	2555	1695	1042	635	500
17	18539	19016	19328	19471	19439	19232	18850	18299	17583	16714	15704	14568	13324	11995	10605	9180	7751	6350	5013	3777	2681	1767	1074	642	500
18	20739	21163	21409	21474	21353	21047	20559	19893	19057	18064	16926	15661	14290	12834	11320	9776	8235	6730	5298	3978	2812	1841	1107	650	500
19	23086	23447	23617	23594	23374	22960	22355	21566	20602	19476	18203	16803	15296	13706	12063	10395	8737	7123	5593	4187	2947	1917	1141	659	500
20	25583	25870	25954	25832	25504	24972	24241	23319	22218	20951	19536	17992	16342	14614	12835	11038	9257	7531	5899	4403	3087	1996	1176	667	500
21	28231	28433	28420	28190	27743	27083	26217	25154	23907	22491	20924	19230	17431	15556	13636	11704	9796	7953	6214	4625	3231	2078	1212	676	500
22	31034	31141	31020	30670	30094	29296	28285	27071	25669	24095	22370	20516	18561	16533	14465	12393	10354	8388	6540	4855	3380	2162	1249	685	500
23	33993	33993	33753	33273	32557	31611	30445	29071	27505	25764	23872	21852	19733	17546	15325	13106	10930	8838	6877	5092	3533	2248	1287	694	500
24	37111	36993	36622	36001	35135	34030	32699	31155	29416	27500	25432	23239	20949	18595	16214	13843	11525	9303	7224	5337	3691	2337	1326	703	500

Your Opponent's Investment Number

Table 2. Detailed Payoff Table

Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0																									
1																									
2			1484			2446			3066			3246			2902			2127			1200			581	
3																									
4																									
5			3245			4512			5057			4921			4109			2821			1460			609	
6																									
7																									
8			5705			7036			7332			6749			5383			3536			1724			636	
9																									
10																									
11			9122			10295			10154			8952			6883			4364			2024			667	
12																									
13																									
14			13575			14338			13553			11545			8620			5310			2364			701	
15																									
16																									
17			19132			19206			17555			14548			10603			6376			2743			739	
18																									
19																									
20			25855			24939			22187			17973			12838			7567			3163			781	
21																									
22																									
23			33800			31573			27472			21836			15336			8887			3626			827	
24																									

Your Opponent's Investment Number

Table 3. Rough Payoff Table

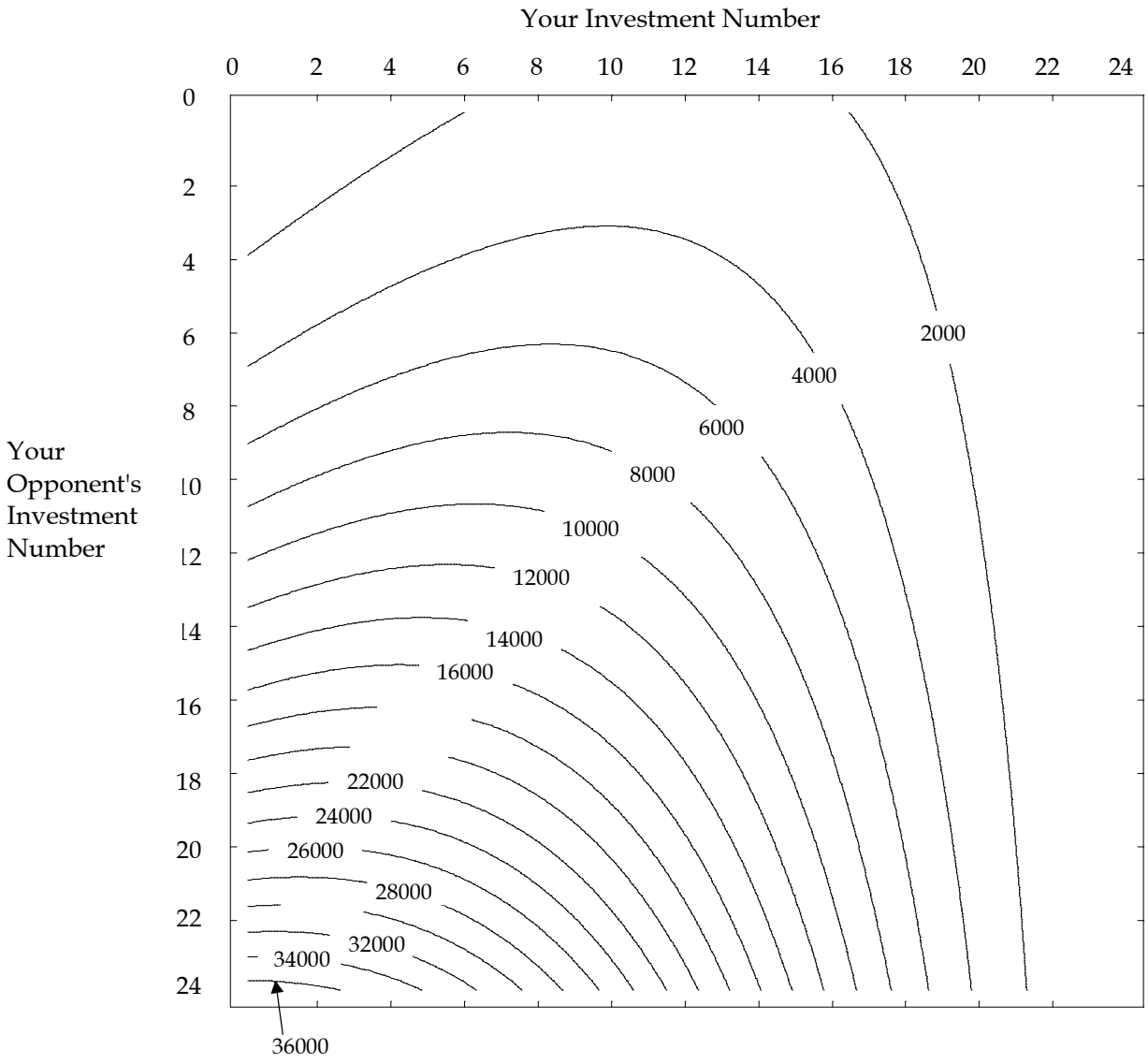


Table 4. Iso-Payoff Map

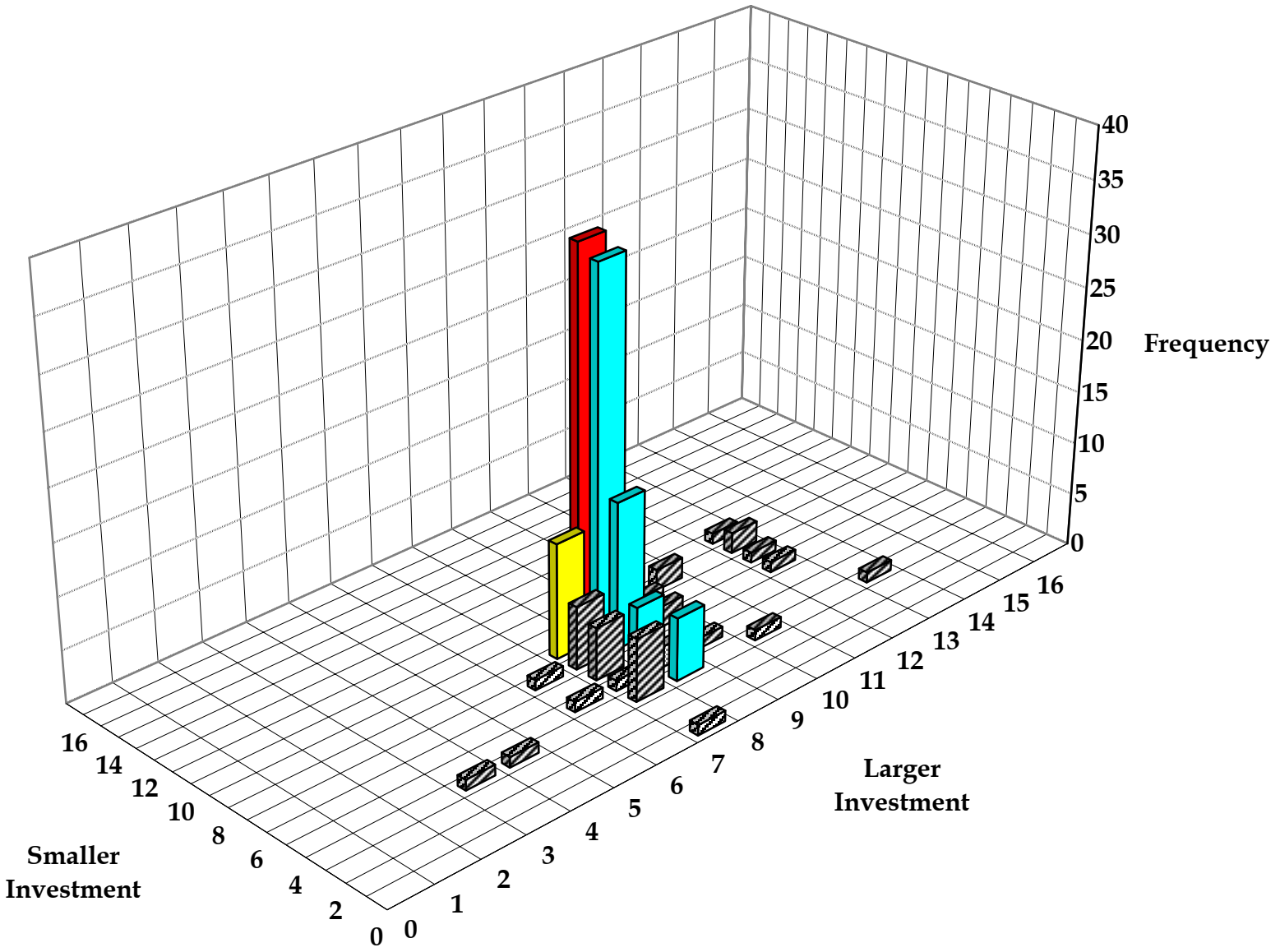


Figure 2. Investment Pattern in Treatment A

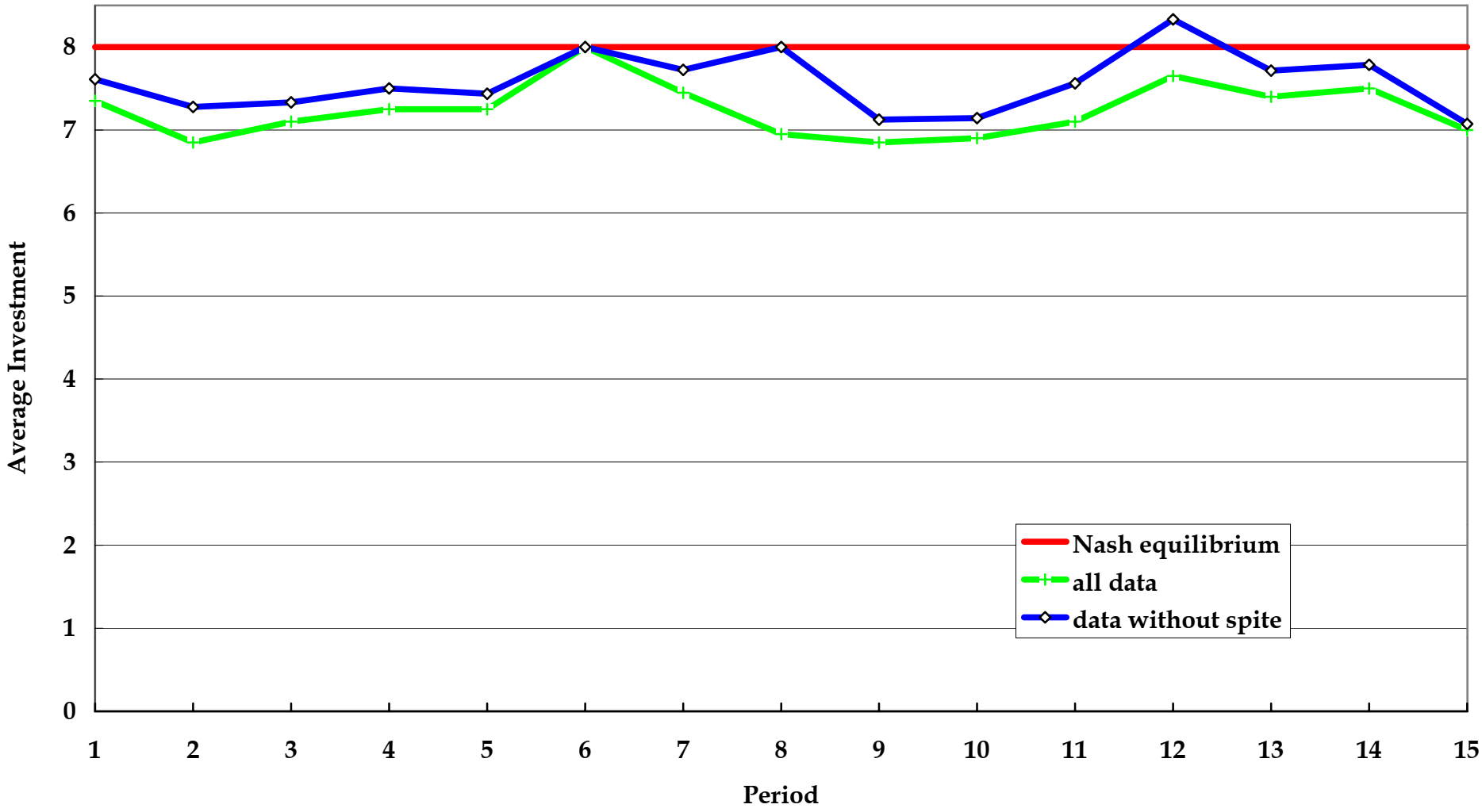


Figure 3. Average Investments in Treatment A.

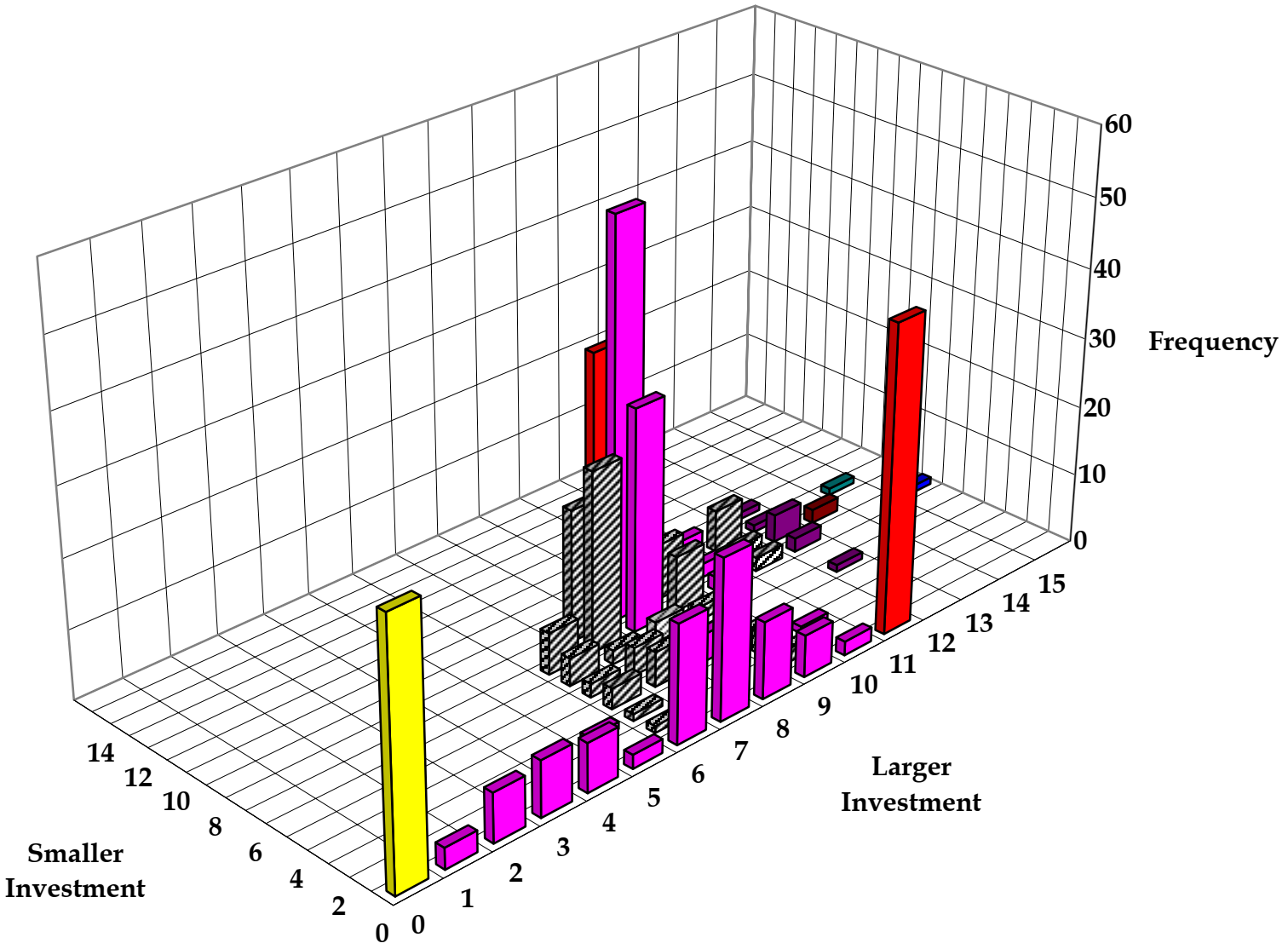


Figure 4. Investment Pattern in the Three Treatment B Sessions.

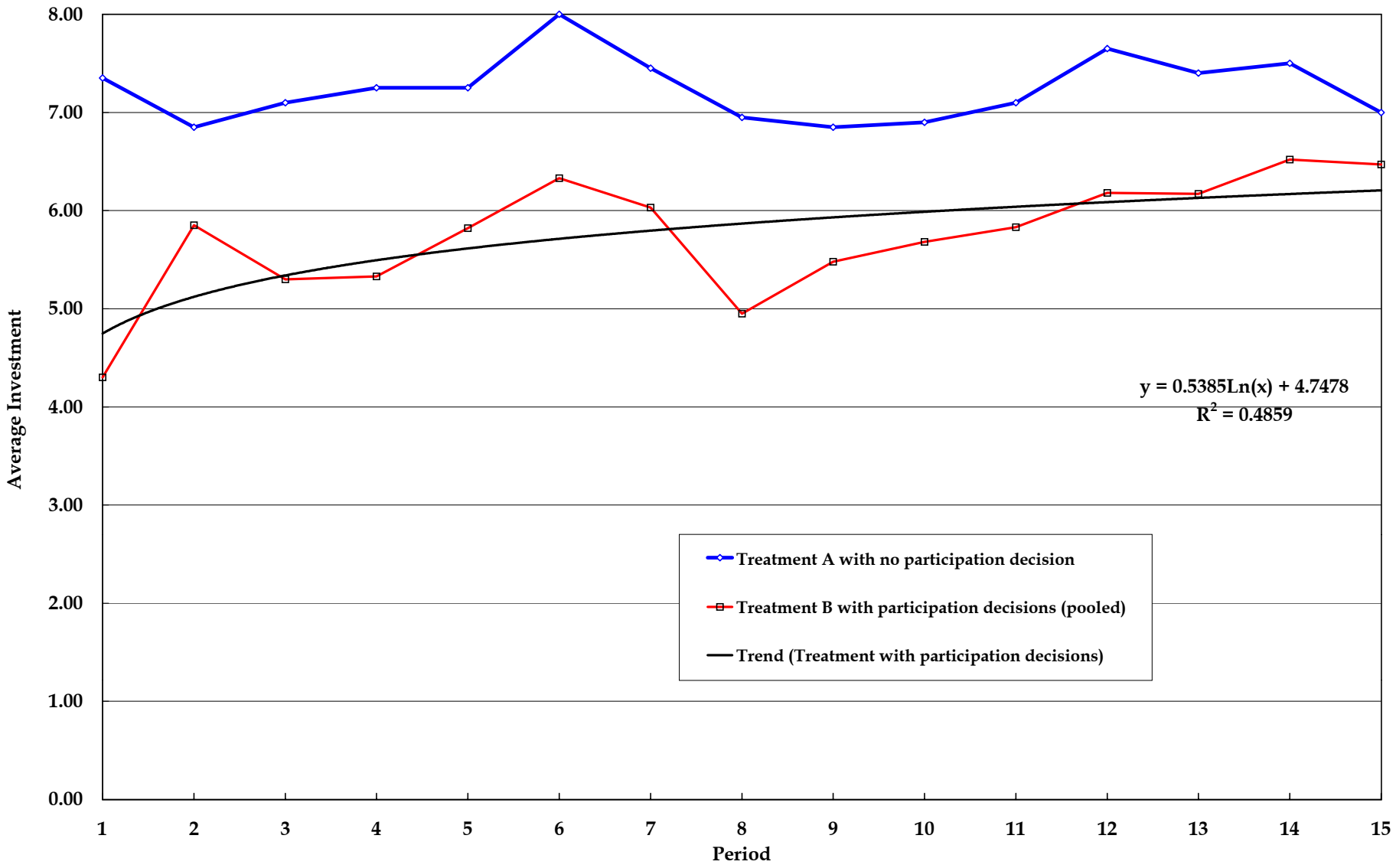


Figure 5. Comparison of Average Investment Patterns:
Treatment A versus Treatment B.

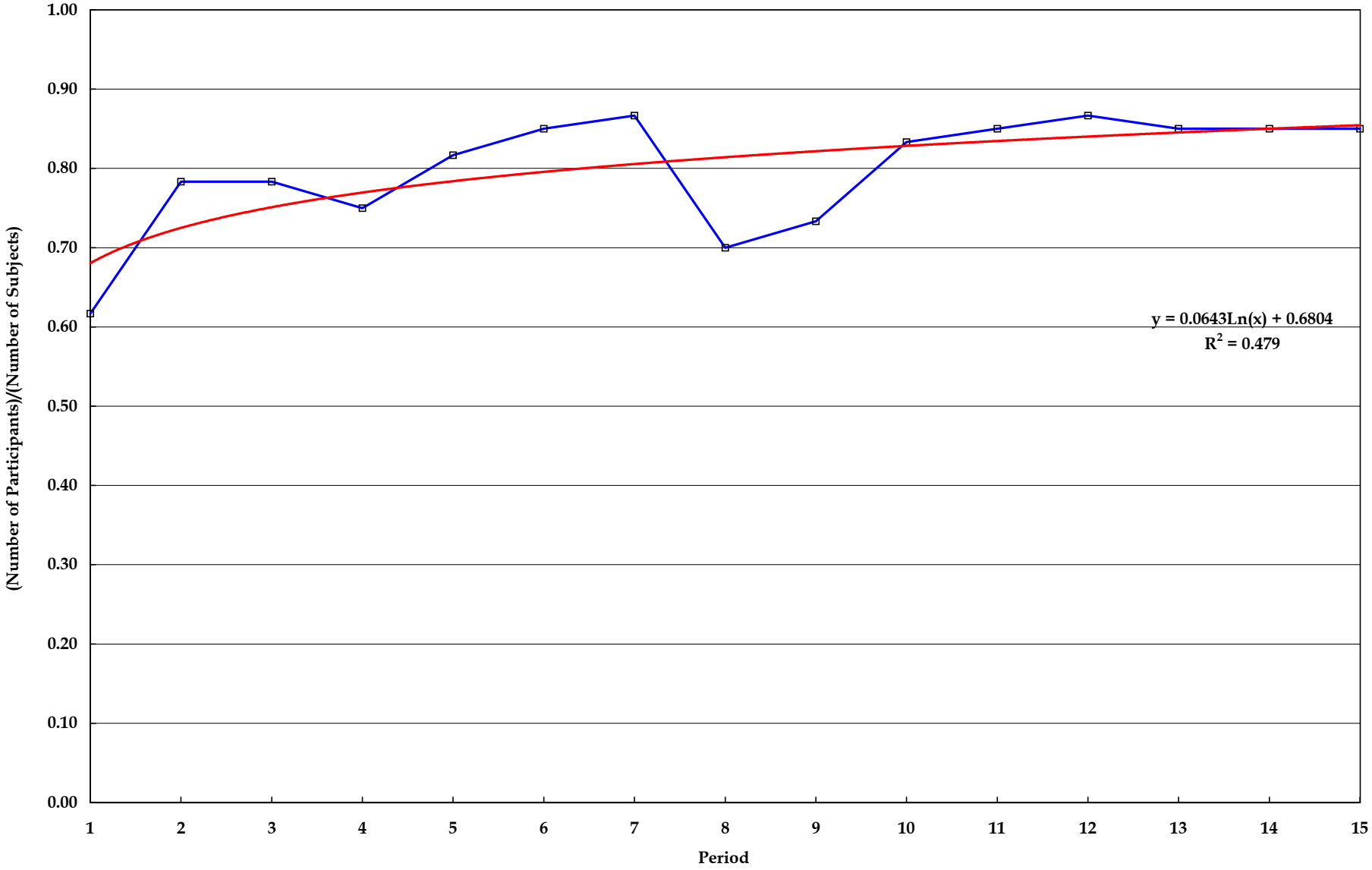


Figure 6. Participation Rate Pattern.

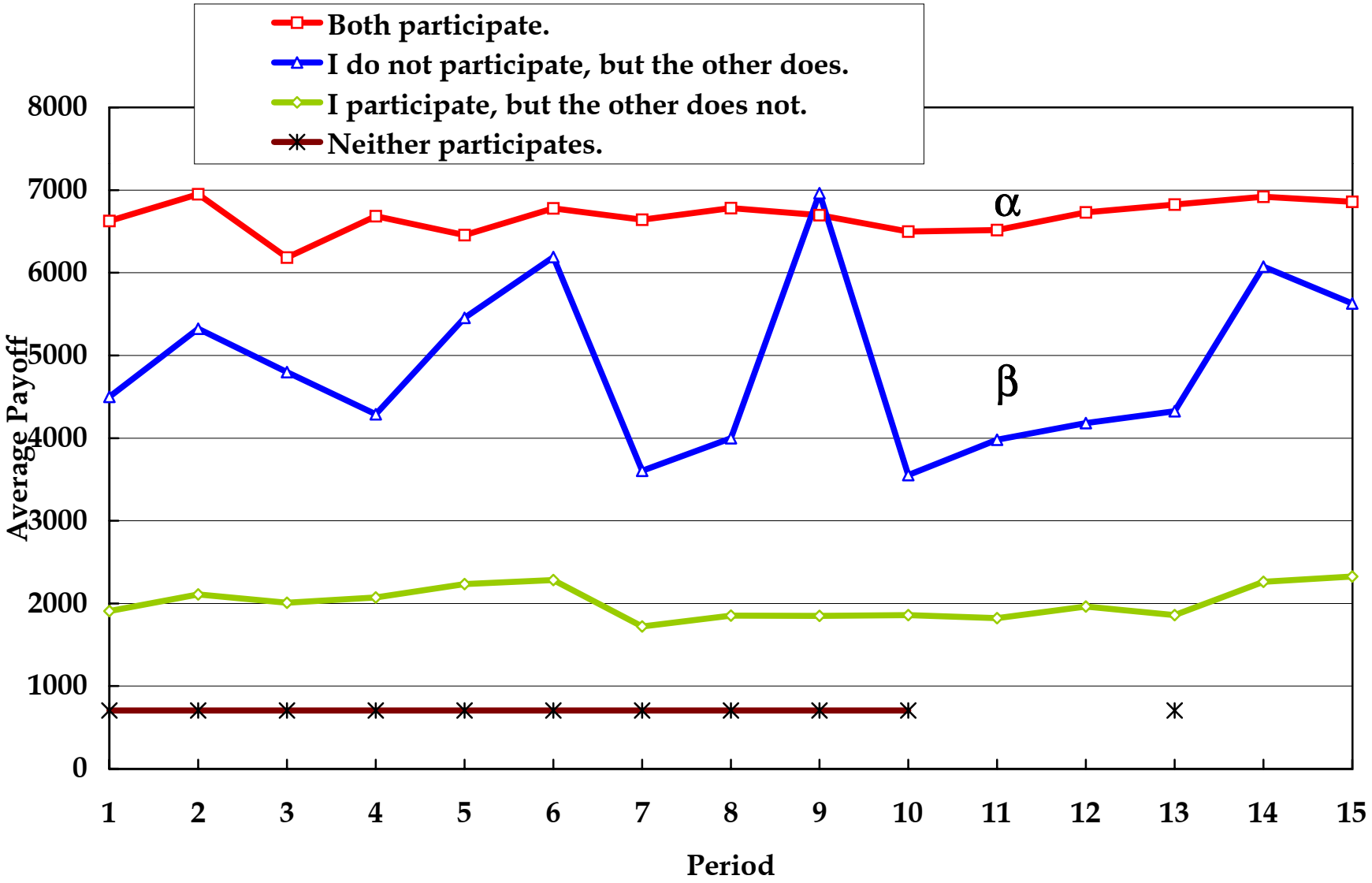


Figure 7. Average Payoffs by Participation Decision.

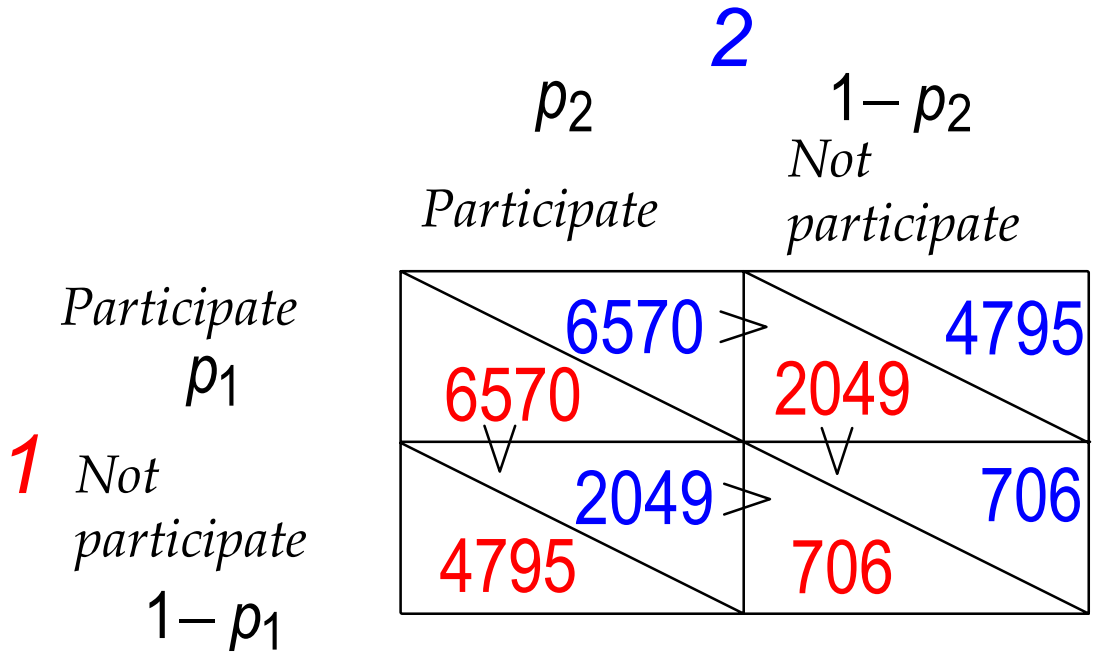


Table 5. The average values of payoff data up to round 5 for the three treatment B sessions.

Dependent Variable = 1 if Participate
0 if Not Participate

Probit Model with random subject effect

Variable or Statistic	Model (1): Cournot Expectations				Model (2): Fictitious Play Expectations			
	Tsukuba B	Tokyo B	Tokyo B′	B and B′ Pooled	Tsukuba B	Tokyo B	Tokyo B′	B and B′ Pooled
Expected Participation Earnings/ Expected Non-Participation Earnings	0.051* (0.022)	-0.044 (0.043)	0.086** (0.031)	0.028* (0.015)	-0.013 (0.054)	-0.132* (0.064)	0.131 (0.193)	-0.002 (0.025)
Intercept	0.618** (0.187)	1.279** (0.224)	1.126** (0.241)	1.010** (0.115)	0.915** (0.211)	1.312** (0.240)	0.935** (0.222)	1.073** (0.120)
Rho[a]	0.382* (0.165)	0.339 (0.221)	0.447* (0.191)	0.344** (0.100)	0.280* (0.137)	0.371* (0.176)	0.382* (0.193)	0.333** (0.094)
Number of Observations	300	300	300	900	300	300	300	900
Estimated Log-likelihood	-147.3	-123.7	-129.8	-405.6	-149.0	-122.7	-130.0	-406.7
Restricted (slopes=0) Log-likelihood	-161.6	-136.5	-145.8	-450.1	-161.6	-136.5	-145.8	-450.1

Standard errors in parentheses.
* denotes significantly different from zero at the 5-percent level; ** denotes significantly different from zero at the 1-percent level (all two-tailed tests except for Expected Participation Earnings/Expected Non-Participation Earnings).
[a]Rho is a standard Hausman test statistic for the presence of random effects.

Table 6. Results of Probit Participation Model

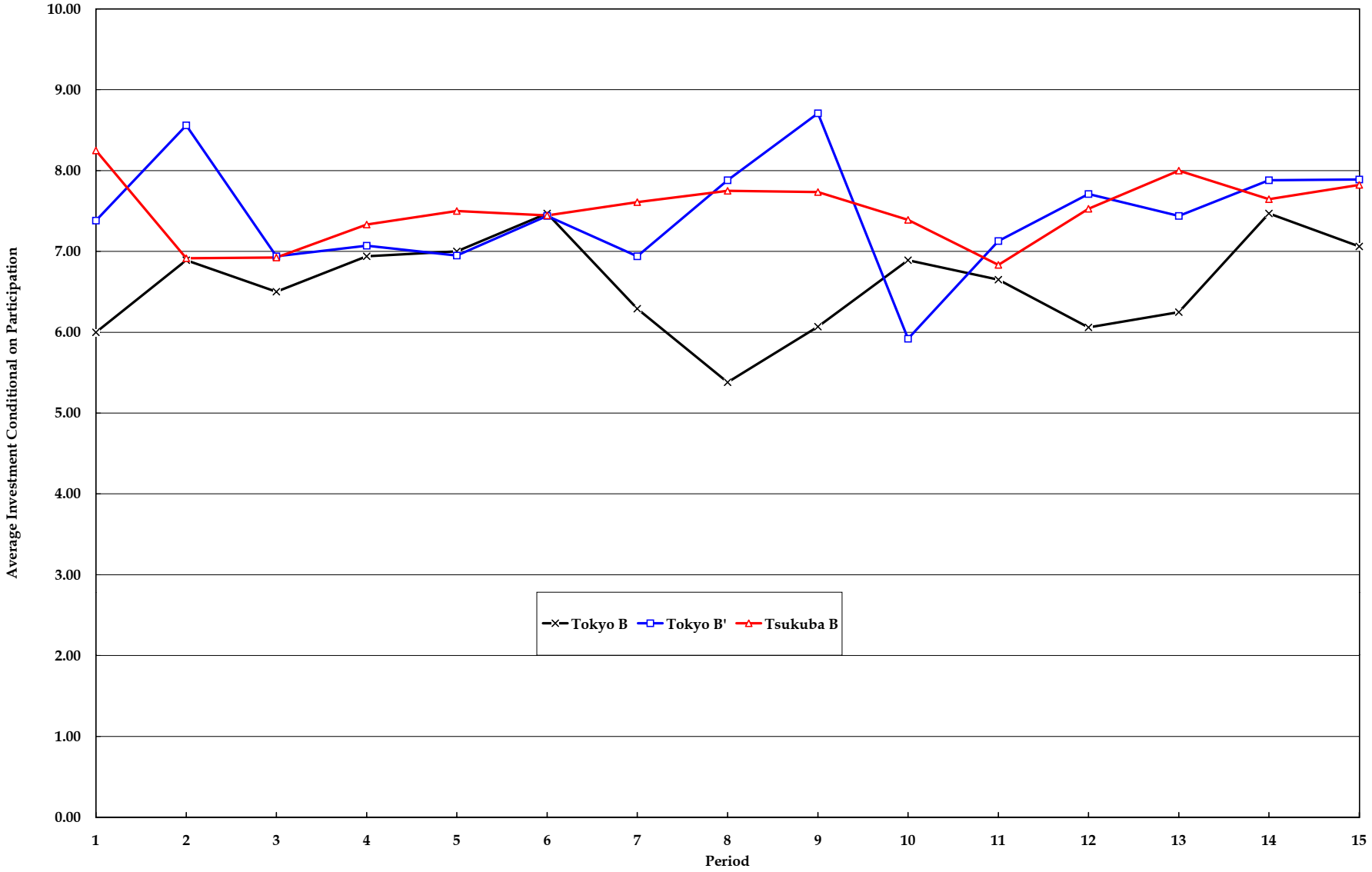


Figure 8. The Average Investment Patterns Conditional on Participation
in Tsukuba B, Tokyo B, and Tokyo B' Sessions.

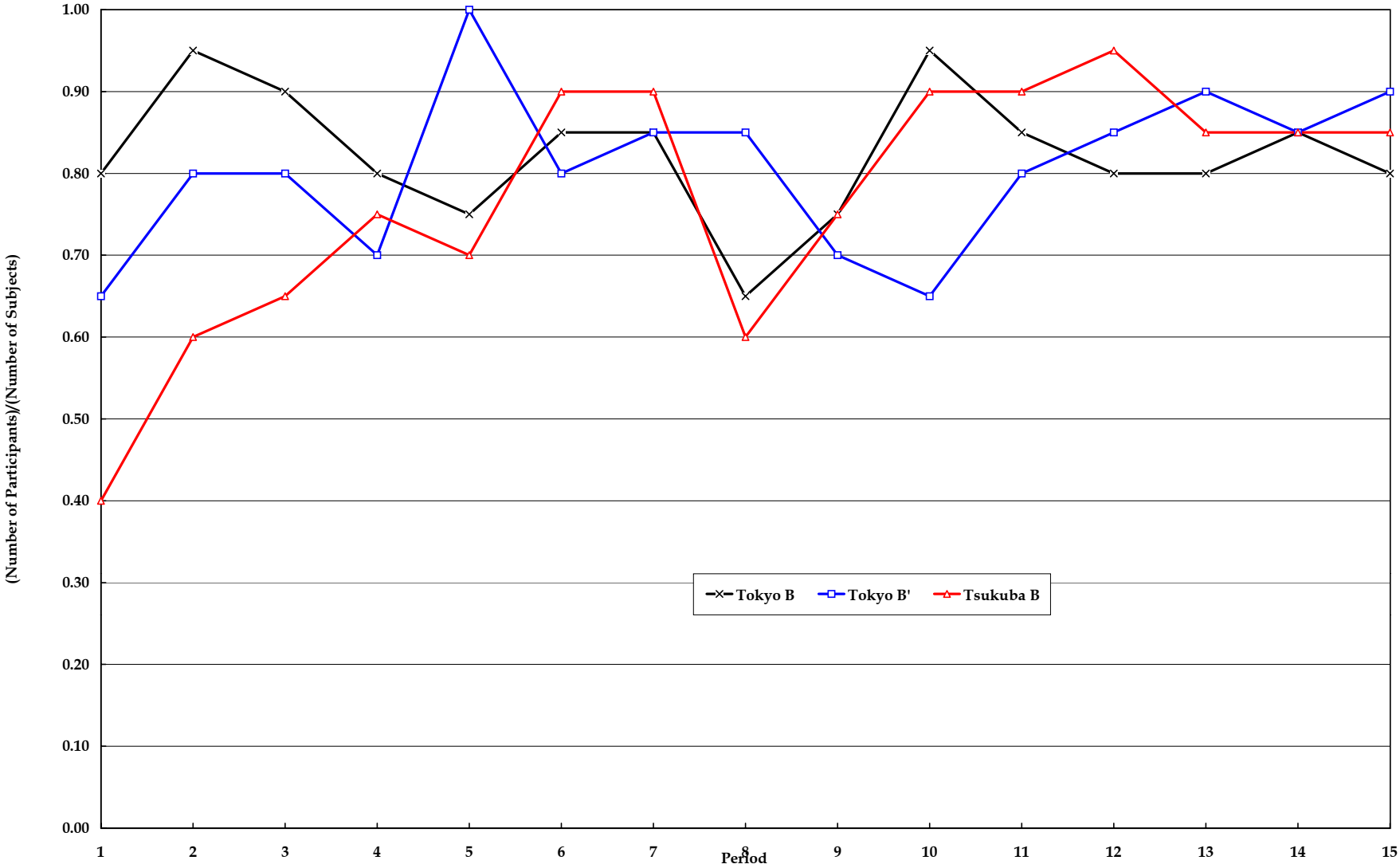


Figure 9. The Average Participation Rate Patterns
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Instruction Sheets and Data

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1. Instruction Sheets for Treatment A

1.1 Overview

In each period, you will receive 24 units of money. This money is not real money, but please imagine that you have 24 units of money. You can determine the number of units for investment out of 24. One of subjects will be your opponent. An experimenter will choose your opponent from the subjects at random.

First, you decide how many units of money out of 24 you invest and then record your investment number in the "Investment Card." An experimenter will collect the "Investment Cards." Your "Investment Card" will be distributed to your opponent, and your opponent's "Investment Card" will be distributed to you. In your opponent's "Investment Card," your opponent's investment number is recorded, so that you know your opponent's investment number. Your payoff is determined by your investment number as well as your opponent's investment number. You can see how much your payoff is by looking at the payoff table.

This is one period. This experiment consists of 4 periods of practice and then 15 periods of the actual experiment. Your opponent in the next period is randomly chosen by an experimenter, and your opponent changes in each period. In the following, the instructions for the experiment are explained in detail. If you follow instructions closely and make investment decisions carefully, you can receive reasonable earnings. Your earnings are determined according to your payoff and will be paid to you after the experiment. How to compute your earnings will be explained later.

From now on, please remember that you cannot talk to other subjects. If this happens, the experiment will be stopped at that point.

Instructions

First, please confirm the following items on your desk.

· Overview (this set of papers) · Experiment Procedure · Record Sheet
· Investment Cards (19 sheets) · Payoff Tables for Practice (3 sheets)
· Instructions for Payoff Tables · Pencil and eraser

The "Experiment Procedure" summarizes what subjects should do in the experiment. Please take a look at it if necessary.

The "Record Sheet" is for the record of your information in the experiment. You will record "Your Investment Number," the "Reason for Your Decision on Investment Number," "Your Opponent's Investment Number," and "Your Payoff" in the "Record Sheet."

The "Investment Card" is to write the investment number that you have chosen and inform it to your opponent. In the upper side of the "Investment Card," the sentence "Your opponent's ID Number □" is written. This is the ID number of your opponent in the present period. In the lower side of the "Investment Card", the sentence "Your ID number is __" is written. This indicates your ID number.

"Payoff Table 1" specifies how much your payoff is for each pair of your investment number and your opponent's investment number. "Payoff Table 2" and "Payoff Table 3" are to help your understanding of "Payoff Table 1." The same three tables are distributed to all subjects. An experimenter will explain these tables according to "Instructions for Payoff Tables" later. The blue "Payoff Tables" that you have now are for practice. The "Payoff Tables" for the actual experiment are red and they will be distributed to you after the practice periods.

Let me explain the detailed procedures of the experiment.

You will select investments for 4 practice periods and then for 15 actual experiment periods. The units of money you have in the beginning of each period are 24 and they are the same for all subjects. One of the subjects is your opponent. You and your opponent play an investment game. You make an investment decision based on "Payoff Tables 1, 2, and 3." You choose an investment number from 0 to 24 and circle the number that you chose in the "Investment Card." You also record this number in the column of "Your Investment Number" in the "Record Sheet." An experimenter collects the "Investment Cards." Your "Investment Card" is distributed to your opponent, and your opponent's "Investment Card" is distributed to you. Please answer the question of the "Reason for Your Decision on Your Investment Number" in the "Record Sheet," while the experimenter collects and distributes the "Investment Cards." Please specify what you expected your opponent's investment decision and why you chose your investment number based on your expectation. When your opponent's "Investment Card" is distributed to you, please write your opponent's investment number in the column of "Your Opponent's Investment Number" in the "Record Sheet." Please insert the

"Investment Card" into the envelope beside your desk after you finish writing. "Your investment number" as well as "Your opponent's investment number" have been recorded in the "Record Sheet." Find "Your Payoff" according to "Payoff Tables." "Payoff Table 1" indicates how much "Your Payoff" is, depending on "Your Investment Number" and "Your Opponent's Investment Number". The equation for how to compute your payoff is described at the end of this overview. After checking "Your Payoff," write it in the column of "Your Payoff" in the "Record Sheet."

This is the end of one period. In the next period, an experimenter will choose your opponent at random. You will face a different opponent in each period.

Next let me explain how to read the payoff tables. Please take a look at the "Instructions for Payoff Tables."

Now let me explain about your earnings. Your earnings depend only on the sum of "Your Payoffs" in the actual experiment, but not on your payoffs in the first 4 periods of practice. Your earnings are computed in the following way:

Your earnings = (the sum of "Your Payoffs" in the actual experiment) × 0.025 yen

For example, suppose that the sum of "Your Payoffs" in the actual experiment is 99,970. Then your earnings are 2,499 yen since 99,970 × 0.025 = 2499. Fractions are rounded off to the nearest yen.

You will have three minutes for looking at the "Payoff Tables" for practice before 4 periods of practice begin. After the practice periods, put the "Payoff Tables" for practice into the envelope beside your desk. The "Payoff Tables" for the actual experiment will be distributed afterward. You will have ten minutes for looking at the "Payoff Tables" for the actual experiment before it starts.

You must understand the procedure of the experiment as well as how to read the payoff tables completely. If you have any questions, please ask an experimenter. However, do not talk to other subjects. Please follow experimenters' instructions.

Please see the following equations if you are interested in how to compute your payoff.

The equations for computing "Your Payoff":

"Your Payoff" depends on your investment number and your opponent's investment number. In practice, your payoff is calculated as follows:

$$\text{Your payoff} = \frac{\left\{(24-a)^{0.467} \times (a+b)^{1-0.467}\right\}^{4.4}}{50} + 500\,,$$

where a denotes your investment number and b stands for your opponent's investment number. For example, suppose that "Your Investment Number" is 8 and "Your Opponent's Investment Number" is 10. Then "Your Payoff" is 5737 since

$$\text{Your payoff} = \frac{\left\{(24-8)^{0.467} \times (8+10)^{1-0.467}\right\}^{4.4}}{50} + 500 \approx 5737\,.$$

Fractions are rounded off to one decimal place for all numerical values in the payoff tables.

In the actual experiment, your payoff is determined according to the following equation:

$$\text{Your payoff} = \frac{\left\{(24-a)^{0.47} \times (a+b+3)^{1-0.47}\right\}^{4.45}}{50} + 500\,,$$

where a denotes your investment number and b stands for your opponent's investment number.

1.2. Experiment Procedure

(1) Instructions for the experiment

(2) Practice

・An experimenter instructs subjects that "You have 3 minutes to look at payoff tables."

・After 3 minutes, an experimenter instructs subjects that "You will select investments for 4 practice period. Let us start the first period."

・Decide your investment number and circle the number that you have chosen in the "Investment Card."

・Write the circled number in the "Investment Card" into the column of "Your Investment Number" in the "Record Sheet."

・Take off the top sheet of the bunched "Investment Cards" and put it up-side-down on your table.

・While an experimenter collects and redistributes "Investment Cards," fill out the column of the "Reason for Your Decision on Investment Number."

・When your opponent's "Investment Card" is distributed to you, write your opponent's investment number in the column of "Your Opponent's Investment Number" in the "Record Sheet."

・Put the "Investment Card" into the envelope beside your desk.

・Find your payoff by looking at "Payoff Table 1" and write it in the column of "Your Payoff" in the "Record Sheet."

・An experimenter instructs subjects that "Let us start the second period for practice."

* Practice consists of 4 periods. The above procedure is repeated 4 times.

* After practice, an experimenter instructs subjects that "Please put the "Payoff Tables" for practice into the envelope beside your desk."

An experimenter distributes "Payoff Tables" for the actual experiment.

(3) The actual experiment

・An experimenter instructs subjects that "You have 10 minutes to look at payoff tables."

・After 10 minutes, an experimenter instructs subjects that "You will selects investments for 15 actual experiment periods. Let us start the first period of the actual experiment".

・Decide your investment number and circle the number that you have chosen in the "Investment Card."

・Write the circled number in the "Investment Card" into the column of "Your

Investment Number" in the "Record Sheet."

・Take off the top sheet of the bunched "Investment Cards" and put it up-side-down on your table.

・While an experimenter collects and redistributes "Investment Cards", fill out the column of the "Reason for Your Decision on Investment Number."

・When your opponent's "Investment Card" is distributed to you, write your opponent's investment number in the column of "Your Opponent's Investment Number" in the "Record Sheet."

・Put the "Investment Card" into the envelope beside your desk.

・Find your payoff by looking at "Payoff Table 1" and write it in the column of "Your Payoff" in the "Record Sheet."

・An experimenter instructs subjects that "Let us start the second period in the actual experiment".

* The actual experiment consists of 15 periods. The above procedure is repeated 15 times.

* Please follow experimenter's instructions after the fifteenth period.

(4) After the experiment

・Experimenters collect the "Record Sheets."

・Experimenters distribute the "Personal Information Sheet and Receipt" and the sheet of "Questionnaires on the Experiment." Please fill out your name, address, and etc. in the "Personal Information Sheet and Receipt." Also, please answer questions in the sheet of "Questionnaires on the Experiment."

・The earnings are paid one by one. Please wait until your name is called.

・After receiving your earnings, please fill out the receipt.

1.3. Instructions for Payoff Tables

There are three kinds of payoffs tables. The same three tables are distributed to all subjects. Also, "Your Payoff" in the experiment is determined only by "Payoff Table 1." "Payoff Table 2" and "Payoff Table 3" are to help your understanding of "Payoff Table 1."

(1) Instructions for "Payoff Table 1"

"Payoff Table 1" specifies "Your Payoff," depending on "Your Investment Number" and "Your Opponent's Investment Number." In this table, the column denotes "Your Investment Number" and the row denotes "Your Opponent's Investment Number." For example, if "Your Investment Number" is 5 and "Your Opponent's Investment Number" is 3, "Your Payoff" is the number in the cell of column 5-row 3, that is, 1,613.

Payoff Table 1 (for practice)

Your Investment Number

Your Opponent's Investment Number	0	1	2	3	4	5	6
0	500	513	558	637	743	870	1007
1	514	564	651	769	911	1067	1228
2	570	665	796	954	1130	1314	1496
3	680	824	1000	1196	1404	1613	1813

(2) Instruction for "Payoff Table 2"

"Payoff Table 2" is a rough version of "Payoff Table 1." In this table, the column denotes "Your Investment Number" and the row denotes "Your Opponent's Investment Number," as in "Payoff Table 1." However, the number in a large cell of this table is the average values of the numbers in the corresponding cells of "Payoff Table 1." For example, consider the case in which "Your Investment Numbers" are from 4 to 6 and "Your Opponent's Investment Numbers" are from 0 to 3. Please see the above "Payoff Table 1." There are three "Your Investment Numbers," 4, 5, and 6, in "Payoff Table 1." On the other hand, there are four "Your Opponent's Investment Numbers," 0, 1, 2, 3. Therefore, in total, there are $3 \times 4 = 12$ numbers in "Payoff Table 1." Next please see the following "Payoff Table 2." The number in the shaded cell of "Payoff Table 2" is 1,216. This is the average value of 12 numbers in the corresponding cells of "Payoff Table 1."

Payoff Table 2 (for Practice)

Your Investment Number

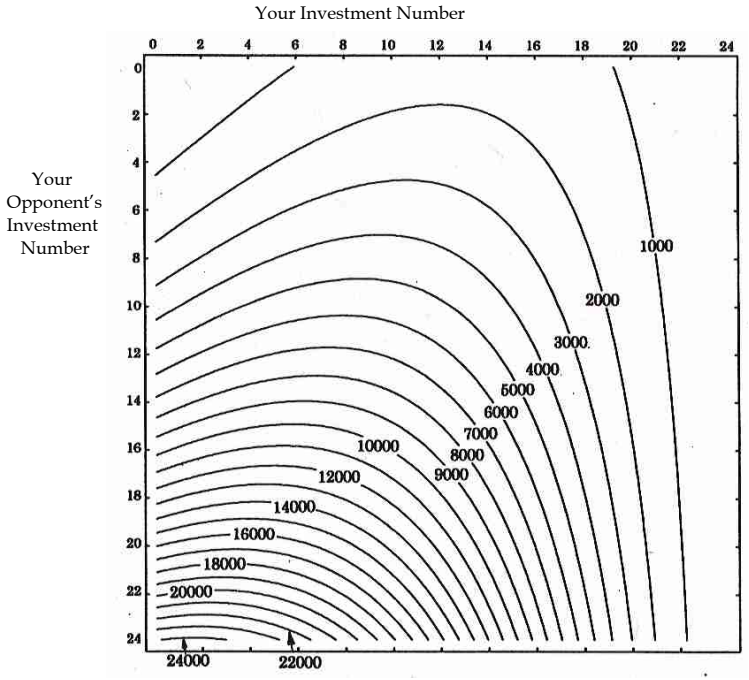
Your Opponent's Investment Number	0	1	2	3	4	5	6
0							
1							
2			712		<	1216	<
3			∧			∧	
4							
5			1500		<	2390	<
6			∧			∧	

Next let me explain the meaning of the symbol "<" in this table. This symbol indicates which numbers in the neighbor are larger. A number in the open side of the symbol is larger than a number in the other side. For example, let us compare 712 and 1,216 in "Payoff Table 2." Since 712 is smaller than 1,216, 1216 is located in the open side of the symbol. Also, since 1,216 is smaller than 2309, 2309 is located in the open side of the symbol.

(3) Instructions for "Payoff Table 3"

In "Payoff Table 3", the horizontal axis denotes "Your Investment Number" and the vertical axis denotes "Your Opponent's Investment Number." Payoff levels are represented by contours in this table. Payoff levels increase in the south-west direction. For example, consider the case in which "Your Investment Number" is 10 and "Your Opponent's Investment Number" is 6. In the following table, draw a vertical line down from "Your Investment Number" 10 and a horizontal line from "Your Opponent's Investment Number" 6 to the right. The intersection of these two lines denotes "Your Payoff." This intersection lies between the contour 3,000 and the contour 4,000. This means that your payoff is a value between 3,000 and 4,000. You will find that your payoff is 3,520 by looking at "Payoff Table 1."

Payoff Table 3 (for Practice)



This is the end of instructions for three payoff tables.

1.4. Investment Card

The Actual Experiment

Your opponent's ID number is [ ] Period 1

Please circle your investment number.

0	1	2	3	4	5	6	7	8	9	10	11	12	13
14	15	16	17	18	19	20	21	22	23	24			

Your ID number is _____.

A

1.5. Record Sheet

Practice

	Your Investment Number	The Reason for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1 (White)				
Period 2 (Red)				
Period 3 (Blue)				
Period 4 (Yellow)				

The parenthesis under the number of period indicates the color of the investment card.

The Actual Experiment

	Your Investment Number	The Reason for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1 (White)				
Period 2 (Red)				
Period 3 (Blue)				
Period 4 (Yellow)				

	Your Investment Number	The Reason for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 5 (White)				
Period 6 (Red)				
Period 7 (Blue)				
Period 8 (Yellow)				
Period 9 (White)				
Period 10 (Red)				
Period 11 (Blue)				
Period 12 (Yellow)				
Period 13 (White)				
Period 14 (Red)				
Period 15 (Blue)				

Your ID number is

1.6. Questionnaires on the Experiment

ID Number [ ]

Please answer the following questions.

(1) Did you understand the rules of the experiment? Please circle one of the numbers of the following answers. If you choose 2, circle either "Practice" or "Actual Experiment" and write the number of period from which you have understood the rules.

1. I have understood the rules from the beginning of the experiment.
2. I have understood the rules from a middle of the experiment:
   From period ( ) in Practice・Actual Experiment
3. I could not understand the rules.

(2) Did you understand the three payoff tables? Please circle one of the numbers of the following answers. If you choose 2, write the numbers of the payoff tables that you could not understand.

1. I understood all three tables.
2. I could not understand payoff table ( ).

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number? Please answer these questions concretely as much as you can.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions? Choose one of the following.

1. It is desirable that my payoff is high, regardless of my opponent's payoff.
2. If my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small.
3. It is desirable that both my payoff and my opponent's payoff are as high as possible.
4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.
5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff.
6. Others (please specify).

(5) What did you think about your opponent's investment? Please choose one of the following.

1. I always expected how much my opponent invests.
2. I did not think about it in particular.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

1. All expectations came true.
2. ( ) % of expectations came true.
3. No expectation came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them? Please answer these questions concretely as much as you can.

(8) Finally, what would be the best choice for your investment? What do you think from your experience in the experiment? Why? Please answer these questions concretely as much as you can.

Please confirm that your ID number is filled in again.

Thank you very much.

A

1.7a. Payoff Table 1 (for Practice)

A

Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	500	513	558	637	743	870	1007	1148	1282	1403	1503	1577	1621	1631	1606	1547	1456	1338	1198	1045	888	741	617	531	500
1	514	564	651	769	911	1067	1228	1386	1531	1656	1754	1821	1852	1845	1800	1718	1602	1458	1292	1114	936	769	630	535	500
2	570	665	796	954	1130	1314	1496	1667	1820	1945	2038	2094	2109	2081	2013	1904	1761	1588	1394	1189	986	798	643	538	500
3	680	824	1000	1196	1404	1613	1813	1995	2150	2272	2356	2396	2391	2340	2244	2106	1931	1727	1502	1268	1039	830	658	542	500
4	854	1047	1266	1500	1737	1967	2181	2369	2524	2638	2708	2729	2700	2621	2494	2323	2114	1875	1617	1353	1096	863	673	545	500
5	1097	1340	1600	1867	2130	2379	2602	2792	2942	3044	3096	3093	3036	2925	2763	2556	2310	2034	1740	1442	1156	898	689	550	500
6	1416	1705	2004	2302	2587	2849	3078	3266	3405	3491	3520	3490	3400	3253	3053	2805	2518	2202	1870	1537	1219	935	706	554	500
7	1815	2148	2483	2807	3110	3381	3610	3790	3915	3980	3981	3918	3792	3605	3362	3071	2740	2381	2008	1637	1285	973	723	558	500
8	2299	2673	3039	3385	3701	3976	4201	4368	4473	4512	4481	4381	4213	3981	3692	3353	2975	2570	2153	1742	1355	1014	742	563	500
9	2871	3282	3675	4039	4362	4635	4850	5000	5080	5087	5019	4877	4663	4383	4043	3653	3224	2770	2306	1853	1428	1057	761	568	500
10	3536	3978	4393	4769	5095	5362	5561	5688	5737	5707	5596	5407	5143	4809	4415	3969	3486	2980	2467	1969	1505	1101	781	573	500
11	4296	4766	5197	5580	5902	6156	6335	6432	6446	6373	6214	5973	5653	5262	4808	4304	3762	3200	2636	2090	1586	1148	803	578	500
12	5156	5647	6089	6472	6785	7020	7172	7234	7206	7085	6873	6574	6194	5740	5223	4656	4053	3432	2813	2217	1670	1196	824	584	500
13	6117	6624	7071	7447	7745	7956	8074	8095	8018	7844	7573	7212	6766	6245	5660	5026	4358	3675	2998	2350	1757	1247	847	589	500
14	7183	7699	8144	8509	8784	8963	9042	9016	8885	8651	8316	7886	7370	6777	6120	5414	4677	3928	3191	2488	1848	1299	871	595	500
15	8357	8875	9312	9658	9904	10045	10077	9997	9806	9506	9101	8598	8005	7335	6602	5820	5011	4193	3392	2633	1943	1354	896	601	500
16	9641	10155	10576	10896	11106	11202	11181	11041	10783	10411	9930	9347	8673	7922	7107	6246	5359	4470	3602	2783	2042	1410	921	608	500
17	11037	11540	11939	12225	12392	12436	12355	12147	11816	11366	10802	10135	9375	8536	7635	6690	5723	4758	3820	2938	2144	1469	948	614	500
18	12549	13033	13401	13646	13763	13748	13599	13318	12907	12371	11719	10961	10109	9178	8186	7153	6102	5057	4047	3100	2250	1530	975	621	500
19	14178	14635	14965	15161	15220	15138	14915	14552	14055	13428	12682	11827	10877	9849	8761	7636	6496	5368	4282	3268	2360	1593	1003	628	500
20	15926	16348	16632	16772	16765	16609	16304	15853	15262	14537	13690	12732	11679	10549	9360	8138	6905	5691	4526	3442	2474	1658	1033	635	500
21	17796	18175	18405	18480	18399	18161	17766	17220	16528	15699	14744	13678	12516	11277	9984	8659	7330	6026	4779	3622	2591	1725	1063	643	500
22	19790	20117	20284	20287	20124	19795	19304	18654	17854	16914	15845	14664	13387	12035	10631	9201	7771	6374	5041	3808	2713	1795	1094	651	500
23	21910	22176	22272	22193	21940	21513	20916	20156	19241	18182	16993	15691	14294	12823	11304	9762	8228	6733	5311	4000	2839	1867	1126	659	500
24	24157	24354	24369	24201	23849	23315	22606	21727	20690	19506	18190	16760	15236	13641	12001	10344	8701	7104	5591	4199	2968	1941	1159	667	500

Your Opponent's Investment Number

1.7b. Payoff Table 2 (for Practice)

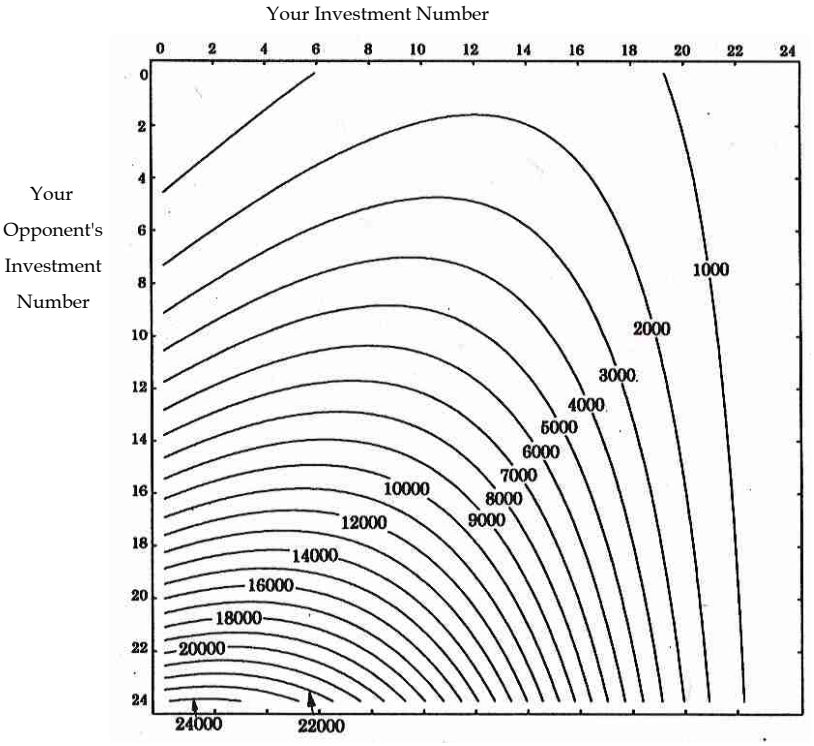
A

Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0																									
1																									
2			712			1216			1688			1959			1903			1521			967			558	
3																									
4																									
5			1500			2390			2941			3086			2755			2031			1166			580	
6																									
7																									
8			2876			3981			4467			4369			3683			2570			1372			602	
9																									
10																									
11			4990			6154			6434			5959			4798			3203			1609			627	
12																									
13																									
14			7916			8954			8869			7870			6111			3936			1880			656	
15																									
16																									
17			11720			12420			11796			10117			7628			4771			2185			687	
18																									
19																									
20			16456			16586			15237			12714			9357			5712			2526			723	
21																									
22																									
23			22176			21485			19214			15673			11305			6762			2903			762	
24																									

Your Opponent's Investment Number

1.7c. Payoff Table 3 (for practice)



1.7d. Payoff Table 1 (for the Actual Experiment)

Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	706	871	1072	1297	1536	1775	2003	2210	2386	2523	2615	2658	2648	2585	2470	2309	2106	1871	1614	1349	1091	858	669	543	500
1	905	1127	1379	1647	1919	2183	2427	2641	2816	2944	3019	3039	3001	2905	2755	2555	2313	2038	1743	1443	1154	894	685	548	500
2	1186	1465	1764	2072	2374	2658	2913	3129	3297	3411	3465	3456	3385	3252	3061	2819	2534	2217	1881	1543	1220	933	703	552	500
3	1554	1888	2232	2575	2902	3202	3463	3675	3831	3925	3952	3911	3801	3626	3391	3102	2770	2406	2027	1648	1290	973	721	556	500
4	2017	2401	2787	3160	3508	3817	4078	4281	4420	4488	4483	4403	4250	4028	3743	3404	3020	2608	2181	1759	1363	1015	740	561	500
5	2578	3010	3432	3831	4193	4507	4762	4950	5064	5101	5057	4934	4733	4459	4119	3725	3287	2821	2344	1877	1441	1060	760	566	500
6	3244	3718	4171	4590	4960	5272	5515	5681	5766	5765	5677	5504	5249	4918	4519	4065	3568	3045	2516	2000	1522	1106	781	571	500
7	4018	4529	5008	5440	5812	6115	6339	6478	6526	6481	6343	6114	5800	5406	4944	4425	3866	3282	2696	2129	1607	1155	802	576	500
8	4904	5447	5944	6383	6751	7038	7237	7340	7345	7250	7056	6765	6385	5924	5393	4806	4179	3532	2886	2265	1696	1206	825	582	500
9	5907	6475	6984	7422	7779	8043	8209	8271	8225	8073	7816	7458	7007	6472	5867	5207	4508	3793	3084	2407	1789	1259	849	588	500
10	7031	7616	8130	8561	8897	9132	9257	9270	9168	8951	8624	8193	7664	7051	6367	5628	4854	4067	3292	2555	1886	1315	874	594	500
11	8278	8873	9384	9800	10109	10306	10384	10339	10173	9886	9482	8970	8359	7661	6892	6070	5217	4354	3509	2710	1987	1372	899	600	500
12	9653	10250	10750	11142	11416	11567	11589	11480	11242	10877	10390	9791	9090	8302	7444	6534	5596	4654	3736	2871	2092	1432	926	606	500
13	11158	11749	12229	12589	12820	12916	12875	12694	12376	11925	11349	10656	9860	8976	8022	7019	5992	4967	3972	3039	2201	1494	953	613	500
14	12796	13372	13824	14144	14323	14356	14243	13982	13576	13033	12358	11565	10667	9681	8627	7526	6406	5292	4217	3213	2315	1559	982	620	500
15	14570	15123	15538	15808	15925	15888	15694	15344	14844	14199	13420	12520	11514	10419	9258	8055	6836	5631	4473	3394	2433	1626	1012	627	500
16	16484	17003	17372	17583	17630	17513	17229	16783	16179	15426	14535	13521	12399	11191	9918	8606	7285	5984	4738	3582	2555	1695	1042	635	500
17	18539	19016	19328	19471	19439	19232	18850	18299	17583	16714	15704	14568	13324	11995	10605	9180	7751	6350	5013	3777	2681	1767	1074	642	500
18	20739	21163	21409	21474	21353	21047	20559	19893	19057	18064	16926	15661	14290	12834	11320	9776	8235	6730	5298	3978	2812	1841	1107	650	500
19	23086	23447	23617	23594	23374	22960	22355	21566	20602	19476	18203	16803	15296	13706	12063	10395	8737	7123	5593	4187	2947	1917	1141	659	500
20	25583	25870	25954	25832	25504	24972	24241	23319	22218	20951	19536	17992	16342	14614	12835	11038	9257	7531	5899	4403	3087	1996	1176	667	500
21	28231	28433	28420	28190	27743	27083	26217	25154	23907	22491	20924	19230	17431	15556	13636	11704	9796	7953	6214	4625	3231	2078	1212	676	500
22	31034	31141	31020	30670	30094	29296	28285	27071	25669	24095	22370	20516	18561	16533	14465	12393	10354	8388	6540	4855	3380	2162	1249	685	500
23	33993	33993	33753	33273	32557	31611	30445	29071	27505	25764	23872	21852	19733	17546	15325	13106	10930	8838	6877	5092	3533	2248	1287	694	500
24	37111	36993	36622	36001	35135	34030	32699	31155	29416	27500	25432	23239	20949	18595	16214	13843	11525	9303	7224	5337	3691	2337	1326	703	500

Your Opponent's Investment Number

1.7e. Payoff Table 2 (for the Actual Experiment)

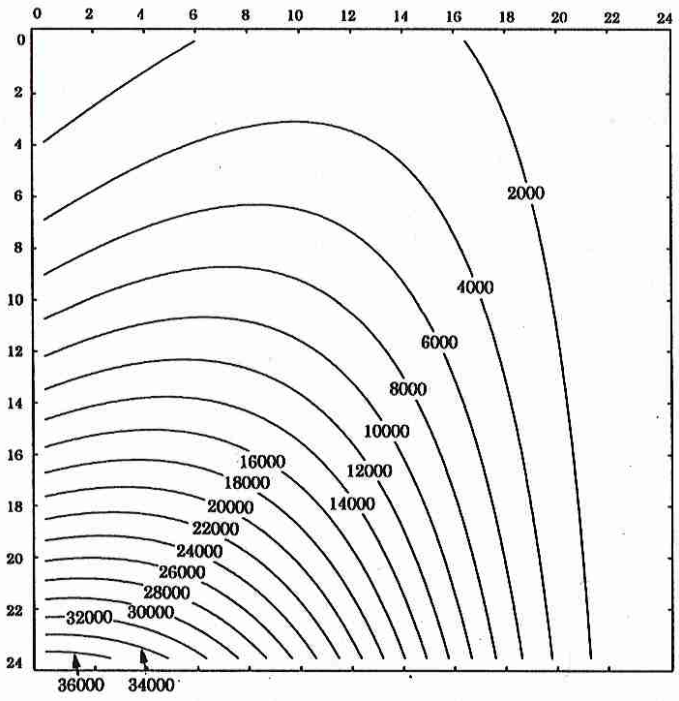
Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0																									
1																									
2			1484			2446			3066			3246			2902			2127			1200			581	
3																									
4																									
5			3245			4512			5057			4921			4109			2821			1460			609	
6																									
7																									
8			5705			7036			7332			6749			5383			3536			1724			636	
9																									
10																									
11			9122			10295			10154			8952			6883			4364			2024			667	
12																									
13																									
14			13575			14338			13553			11545			8620			5310			2364			701	
15																									
16																									
17			19132			19206			17555			14548			10603			6376			2743			739	
18																									
19																									
20			25855			24939			22187			17973			12838			7567			3163			781	
21																									
22																									
23			33800			31573			27472			21836			15336			8887			3626			827	
24																									

Your Opponent's Investment Number

1.7f. Payoff Table 3 (for the actual experiment)

Your Investment Number



Your Opponent's Investment Number

2. Instruction Sheets for Treatment B

2.1. Overview

In each period, you will receive 24 units of money. This money is not real money, but please imagine that you have 24 units of money. You can determine the number of units for investment out of 24. One of subjects will be your opponent. An experimenter will choose your opponent from the subjects at random.

First, you decide whether or not you participate in investment, and record your decision on participation in the "Participation Card." Then an experimenter will collect the "Participation Cards." Your "Participation Card" will be distributed to your opponent, and your opponent's "Participation Card" will be distributed to you. By looking at your opponent's "Participation Card", you can know whether or not your opponent participates in investment. If you wrote "Participate" in the "Participation Card," then choose your investment number. Decide how many units of money out of 24 you invest, and record your investment number in the "Investment Card." Also, if you wrote "Not Participate" in the "Participation Card," then record "Not Participate" in the "Investment Card". Then an experimenter will collect the "Investment Cards." Your "Investment Card" will be distributed to your opponent, and your opponent's "Investment Card" will be distributed to you. By looking at your opponent's "Investment Card," you can know your opponent's investment number. Your payoff is determined by your investment number as well as your opponent's investment number. You can find how much your payoff is by looking at the "Payoff Table."

This is one period. Your opponent in the next period is randomly chosen by an experimenter, and your opponent changes in each period. This experiment consists of 4 periods of practice and then 15 periods of the actual experiment. In the following, the instructions for the experiment are explained in detail. If you follow instructions closely and make investment decisions carefully, you can receive reasonable earnings. Your earnings are determined according to your payoff and will be paid to you after the experiment. How to compute your earnings will be explained later.

Please remember that you cannot talk to other subjects from now on. If this happens, the experiment will be stopped at that point.

Instructions

First, please confirm the following items on your desk.

· Overview (this set of papers) · Experiment Procedure · Record Sheet
· Participation Cards, Investment Cards (38 sheets in total)
· Payoff Tables for Practice (3 sheets) · Instructions for Payoff Tables
· Pencil and eraser

The "Experiment Procedure" summarizes what subjects should do in the experiment. Please take a look at it if necessary.

The "Record Sheet" is for the record of your information in the experiment. You will record "Your Investment Number," "Your Opponent's Investment Number," "Your Participation Decision," "Your Opponent's Participation Decision," "Your Payoff," the "Reason for Your Participation Decision," and the "Reason for Your Decision on Investment Number" in the "Record Sheet."

"Participation Cards" and "Investment Cards" are bound together: the "Participation Card" for the first period is on the top, the "Investment Card" for that period is on the next page, and so on. You will write whether or not you participate in investment in the "Participation Card" and will write your investment number in the "Investment Card." In the upper sides of both cards, you will find the sentence "Your opponent's ID Number is □." This is the ID number of your opponent in the present period. In the lower side, you will find the sentence "Your ID number is __." This indicates your ID number.

The "Payoff Tables" specify how much your payoff is. There are three kinds of tables, each one having a different color: "Payoff Table 1", "Payoff Table 2", and "Payoff Table 3." Two "Supplement Tables" with the same color are attached to each of these "Payoff Tables". The "Supplement Tables" are to help you understand the "Payoff Table." The same tables are distributed to all subjects. Which payoff table should be used depends on your participation decision and your opponent's. An experimenter will explain these tables according to "Instructions for Payoff Tables" later.

The "Payoff Tables" that you have now are for practice. The "Payoff Tables" for the actual experiment will be distributed to you after the practice periods.

Let me explain the detailed procedures of the experiment.

You will select investments for 4 practice periods and then for 15 actual experiment periods. The units of money you have in the beginning of each period are 24 and they are the same for all subjects. One of the subjects is your opponent. You and your opponent play an investment game. First, you decide whether or not you participate in investment by looking at the "Payoff Tables." Then circle either the word "Participate" or the word "Not Participate" in the "Participation Card." Also, write the symbol O in the cell of "Participation in Investment"-"You" if you chose "Participate," and write the symbol × in it if you chose "Not Participate." An experimenter collects the "Participation Cards." Your "Participation Card" is distributed to your opponent, and your opponent's "Participation Card" is also distributed to you. In the meantime, please answer the question of the "Reason for Your Decision on Participation" in the "Record Sheet." Please specify the reason why you chose "Participation" in investment, or why you chose "Not Participate" in investment in the column of the "Reason for Your Decision on Participation." When you have received your opponent's "Participation Card," write the symbol O in the cell of "Participation in Investment"-"Your Opponent" in the "Record Sheet" if your opponent chose "Participate," and write the symbol × in it if your opponent chose "Not Participate." Please insert the "Participation Card" into the envelope beside your desk after you finish writing.

Then you will find the symbol O or × in the cells of "Participation in Investment" - "You" and "Participation in Investment" - "Your Opponent" in the "Record Sheet." The following tables illustrates which "Payoff Table" you should take a look at, depending on combinations of the symbols O and ×:

The record sheet

	You	Your opponent		The payoff table to which you should refer	The color of the payoff table
Participation in investment (write O or ×)	O	O	→	**Payoff Table 1**	**Red**
	O	×	→	**Payoff Table 2**	**Blue**
	×	O	→	**Payoff Table 3**	**Yellow**
	×	×	→	**500**	

Next if the symbol O is in the cell of "Participation in Investment"-"You" in the "Record Sheet," then choose an investment number from 0 to 24 by looking at the "Payoff Tables" and circle the number that you chose in the "Investment Card." You also record this number in the cell of "Investment Number"-"You" in the "Record Sheet." If the symbol × is in the cell of "Participation in Investment"-"You" in the "Record Sheet," then circle the word "Not Participate" in the "Investment Card" and leave a blank in the cell of "Investment Number"-"You" in the "Record Sheet." An experimenter collects the "Investment Cards." Your "Investment Card" is distributed to your opponent, and your opponent's "Investment Card" is distributed to you. While the experimenter collects and distributes the "Investment Cards," fill in the cell of the "Reason for Your Decision on Your Investment Number" in the "Record Sheet." Please specify what you expected your opponent's investment decision and why you chose your investment number based on your expectation.

When your opponent's "Investment Card" has been distributed to you, write your opponent's investment number in the cell of "Investment Number"-"Your Opponents" in the "Record Sheet." Insert the "Investment Card" into the envelope beside your desk after writing it. "Your investment number" as well as "Your opponent's investment number" have been recorded in the "Record Sheet." Find "Your Payoff" according to "Payoff Tables." "Payoff Tables" indicate how much "Your Payoff" is, depending on "Your Investment" and "Your Opponent's Investment". The equation for how to compute your payoff is described at the end of this overview. After checking "Your Payoff," write it in the cell of "Your Payoff" in the "Record Sheet."

This is the end of one period. In the next period, an experimenter chooses your opponent at random. You will face a different opponent in each period.

Next let me explain how to read the payoff tables. Please take a look at the "Instructions for Payoff Tables."

Now let me explain about your earnings. Your earnings depend only on the sum of "Your Payoffs" in the actual experiment, but not on your payoffs in the first 4 periods of practice. Your earnings are computed in the following way:

Your earnings = (the sum of "Your Payoffs" in the actual experiment) × 0.033 yen

For example, suppose that the sum of "Your Payoffs" in the actual experiment is 84,423. Then your earnings are 2786 yen since 84,423 × 0.033 = 2786. Fractions are rounded off to the nearest yen.

You will have three minutes for looking at the "Payoff Tables" for practice before 4 periods of practice begin. After the practice periods, put the "Payoff Tables" for practice into the envelope beside your desk. The "Payoff Tables" for the actual experiment will be distributed afterward. You will have ten minutes for looking at the "Payoff Tables" for the actual experiment before it starts.

You must understand the procedure of the experiment as well as how to read the payoff tables completely. If you have any questions, please ask an experimenter. However, do not talk to other subjects. Please follow experimenters' instructions.

Please see the following equations if you are interested in how to compute your payoff.

The equations for computing "Your Payoff":

"Your Payoff" depends on your investment number and your opponent's investment number. In the practice, your payoff is calculated as follows:

$$\text{Your payoff} = \frac{\left\{(24-a)^{0.467} \times (a+b)^{1-0.467}\right\}^{4.4}}{50} + 500,$$

where a denotes your investment number and b stands for your opponent's investment number. For example, suppose that "Your Investment Number" is 8 and "Your Opponent's Investment Number" is 10. Then "Your Payoff" is 5737 since

$$\text{Your payoff} = \frac{\left\{(24-8)^{0.467} \times (8+10)^{1-0.467}\right\}^{4.4}}{50} + 500 \approx 5737.$$

Fractions are rounded off to one decimal place for all numerical values in the payoff tables.

In the actual experiment, your payoff is determined according to the following equation:

$$\text{Your payoff} = \frac{\left\{(24-a)^{0.47} \times (a+b+3)^{1-0.47}\right\}^{4.45}}{50} + 500,$$

where a denotes your investment number and b stands for your opponent's investment number.

2.2. **Experiment Procedure**

(1) Instructions for the experiment

(2) Practice

・An experimenter instructs subjects that "You have 3 minutes to look at payoff tables."
・After 3 minutes, an experimenter instructs subjects that "You will select investments for 4 practice periods. Let us start the first period".
・Decide whether or not you participate in investment and circle either the word "Participate" or the word "Not Participate" in the "Investment Card."
・If you have chosen "Participate", write the symbol O in the cell of "Participation in Investment"-"You" in the "Record Sheet." If you have chosen "Not Participate", write the symbol × in that cell.
・Take off the top sheet of the bunched "Participation Cards" and put it up-side-down on your table.
・While an experimenter collects and redistributes "Participation Cards," fill out the cell of the "Reason for Your Decision on Participation" in the "Record Sheet."
・When your opponent's "Participation Card" is distributed to you, check which word is circled, "Participate" or "Not Participate." If your opponent has chosen "Participate", write the symbol O in the cell of "Participation in Investment"-"Your Opponent" in the "Record Sheet." If your opponent has chosen "Not Participate", write the symbol × in that cell.
・Put the "Participation Card" into the envelope beside your desk.
・Check the combination of the symbols O and × in two cells of "Participation in Investment"-"You" and "Participation in Investment"-"Your Opponent" in the "Record Sheet" and choose "Payoff Table" you should look at.
・Decide your investment number based on the "Payoff Table" you have chosen.
・If you have selected "Participate" in investment, circle the number that you have chosen in the "Investment Card." If you have selected "Not Participate" in investment, circle the word "Not Participate" in the "Investment Card."
・Write the circled number in the "Investment Card" into the cell of "Investment Number"-"You" in the "Record Sheet." Do not write anything in that cell if you have circled the word "Not Participate" in the "Investment Card."
・Take off the top sheet of the bunched "Investment Cards" and put it up-side-down on your table.

・While an experimenter collects and redistributes "Investment Cards", fill out the cell of the "Reason for Your Decision on Investment Number" in the "Record Sheet."
・When your opponent's "Investment Card" is distributed to you, write your opponent's investment number in the cell of "Investment Number"-"Your Opponent" in the "Record Sheet."
・Put the "Investment Card" into the envelope beside your desk.
・Find your payoff by looking at the "Payoff Table" and write it in the cell of "Your Payoff" in the "Record Sheet."
・An experimenter instructs subjects that "Let us start the second period for practice."
* Practice consists of 4 periods. The above procedure is repeated 4 times.
* After practice, an experimenter instructs subjects that "Please put the "Payoff Tables" for practice into the envelope beside your desk."

An experimenter distributes "Payoff Tables" for the actual experiment.

(3) The actual experiment

・An experimenter instructs subjects that "You have 10 minutes to look at payoff tables."
・After 10 minutes, an experimenter instructs subjects that "You will select investments for 15 actual experiment periods. Let us start the first period of the actual experiment."
・Decide whether or not you participate in investment and circle either the word "Participate" or the word "Not Participate" in the "Investment Card."
・If you have chosen "Participate", write the symbol O in the cell of "Participation in Investment"-"You" in the "Record Sheet." If you have chosen "Not Participate", write the symbol × in that cell.
・Take off the top sheet of the bunched "Participation Cards" and put it up-side-down on your table.
・While an experimenter collects and redistributes "Participation Cards," fill out the cell of the "Reason for Your Decision on Participation" in the "Record Sheet."
・When your opponent's "Participation Card" is distributed to you, check which word is circled, "Participate" or "Not Participate." If your opponent has chosen "Participate", write the symbol O in the cell of "Participation in Investment"-"Your Opponent" in the "Record Sheet." If your opponent has chosen "Not Participate", write the symbol × in that cell.
・Put the "Participation Card" into the envelope beside your desk.

・Check the combination of the symbols O and × in two cells of "Participation in Investment"-"You" and "Participation in Investment"-"Your Opponent" in the "Record Sheet" and choose "Payoff Table" you should look at.
・Decide your investment number based on the "Payoff Table" you have chosen.
・If you have selected "Participate" in investment, circle the number that you have chosen in the "Investment Card." If you have selected "Not Participate" in investment, circle the word "Not Participate" in the "Investment Card."
・Write the circled number in the "Investment Card" into the cell of "Investment Number"-"You" in the "Record Sheet." Do not write anything in that cell if you have circled the word "Not Participate" in the "Investment Card."
・Take off the top sheet of the bunched "Investment Cards" and put it up-side-down on your table.
・While an experimenter collects and redistributes "Investment Cards", fill out the cell of the "Reason for Your Decision on Investment Number" in the "Record Sheet."
・When your opponent's "Investment Card" is distributed to you, write your opponent's investment number in the cell of "Investment Number"-"Your Opponent" in the "Record Sheet."
・Put the "Investment Card" into the envelope beside your desk.
・Find your payoff by looking at the "Payoff Table" and write it in the cell of "Your Payoff" in the "Record Sheet."
・An experimenter instructs subjects that "Let us start the second period of the actual experiment."
* The actual experiment consists of 15 periods. The above procedure is repeated 15 times.
* Please follow experimenter's instructions after the fifteenth period.

(4) After the experiment
・Experimenters collect the "Record Sheets."
・Experimenters distribute the "Personal Information Sheet and Receipt" and the sheet of "Questionnaires on the Experiment." Please fill out your name, address, and etc. in the "Personal Information Sheet and Receipt." Also, please answer questions in the sheet of "Questionnaires on the Experiment."
・The earnings are paid one by one. Please wait until your name is called.
・After receiving your earnings, please fill out the receipt.

2.3. **Instructions for Payoff Tables**

There are three kinds of payoffs tables. Two "Supplemental Payoff Tables" are attached with each payoff table. The same three kinds of tables are distributed to all subjects. "Your Payoff" in the experiment is determined by "Payoff Tables." "Supplemental Payoff Tables " are to help your understanding of "Payoff Tables."

(1) Instructions for "Payoff Table 1," "Supplemental Payoff Table 1-1," and "Supplemental Payoff Table 1-2."

Please take a look at "Payoff Table 1" if the symbol O is written both in the cell of "Participation in Investment"-"You" and in the cell of "Participation in Investment"-"Your Opponent" in the "Record Sheet." "Payoff Table 1" specifies how much "Your Payoff" is, depending on "Your Investment Number" and "Your Opponent's Investment Number." In this table, the column denotes "Your Investment Number" and the row denotes "Your Opponent's Investment Number." For example, if "Your Investment Number" is 5 and "Your Opponent's Investment Number" is 3, "Your Payoff" is the number in the cell of column 5-row 3, that is, 1,613.

Payoff Table 1 (for practice) O O

		Your Investment Number						
		0	**1**	**2**	**3**	**4**	**5**	**6**
Your	**0**	**500**	**513**	**558**	**637**	**743**	**870**	**1007**
Opponent's	**1**	**514**	**564**	**651**	**769**	**911**	**1067**	**1228**
Investment	**2**	**570**	**665**	**796**	**954**	**1130**	**1314**	**1496**
Number	**3**	**680**	**824**	**1000**	**1196**	**1404**	**1613**	**1813**

Next let me explain how to see "Supplemental Payoff Table 1-1."

"Supplemental Payoff Table 1-1" is a rough version of "Payoff Table 1." In this table, the column denotes "Your Investment Number" and the row denotes "Your Opponent's Investment Number," as in "Payoff Table 1." However, the number in a cell of this table is the average values of the numbers in the corresponding cells of "Payoff Table 1." For example, consider the case in which "Your Investment Numbers" are from 4 to 6 and "Your Opponent's Investment Numbers" are from 0 to 3. Please see the above "Payoff Table 1." There are three "Your Investment Numbers," 4, 5, and 6, in "Payoff Table 1." On the other hand, there are four "Your Opponent's Investment Numbers," 0,

1, 2, 3. Therefore, in total, there are 3 × 4 = 12 numbers in "Payoff Table 1." Next please see the following "Supplemental Payoff Table 1-1." The number in the shaded cell of "Supplemental Payoff Table 1-1" is 1,216. This is the average value of 12 numbers in the corresponding cells of "Payoff Table 1."

Supplemental Payoff Table 1-1 (for Practice) O O

Your Investment Number

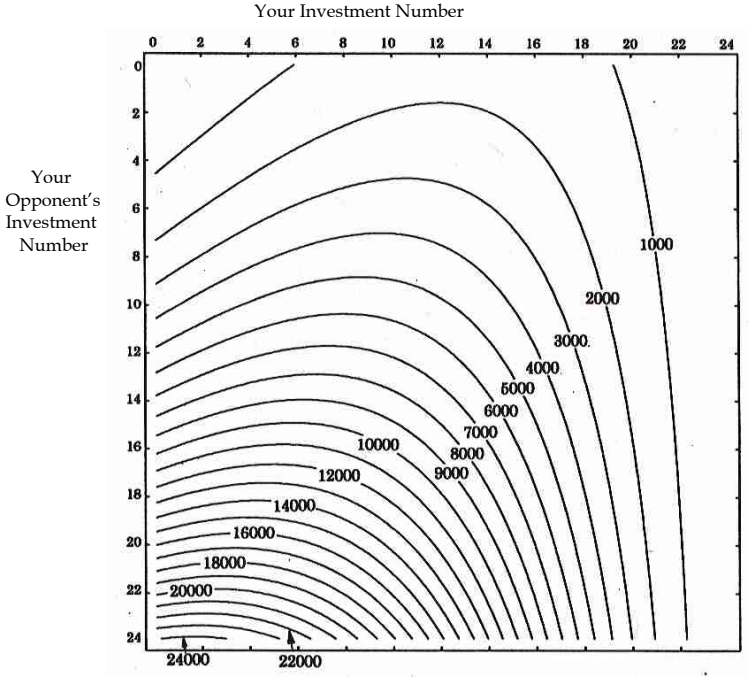
Your Opponent's Investment Number	0	1	2	3	4	5	6
0							
1							
2			712			1216	
3							
4							
5			1500			2390	
6							

Next let me explain the meaning of the symbol "<" in this table. This symbol indicates which numbers in the neighbor are larger. A number in the open side of the symbol is larger than a number in the other side. For example, let us compare 712 and 1,216 in "Supplemental Payoff Table 1-1". Since 712 is smaller than 1,216, 1216 is located in the open side of the symbol. Also, since 1,216 is smaller than 2309, 2309 is located in the open side of the symbol.

Let me explain "Supplemental Payoff Table 1-2."

In "Supplemental Payoff Table 1-2," the horizontal axis denotes "Your Investment Number" and the vertical axis denotes "Your Opponent's Investment Number." Payoff levels are represented by contours in this table. Payoff levels increase in the south-west direction. For example, consider the case in which "Your Investment Number" is 10 and "Your Opponent's Investment Number" is 6. In the following table, draw a vertical line down from "Your Investment Number" 10 and a horizontal line from "Your Opponent's Investment Number" 6 to the right. The intersection of these two lines denotes "Your Payoff." This intersection lies between the contour 3,000 and the contour 4,000. This means that your payoff is a value between 3,000 and 4,000. You will find that your payoff is 3,520 by looking at "Payoff Table 1."

Supplemental Payoff Table 1-2 (for Practice) O O



(2) Instructions for "Payoff Table 2," "Supplemental Payoff Table 2-1," and "Supplemental Payoff Table 2-2."

Please use "Payoff Table 2" if the symbol O is written in the cell of "Participation in Investment"-"You" and the symbol × is in the cell of "Participation in Investment"-"Your Opponent" in the "Record Sheet." The way of seeing this table is the same as for "Payoff Table 1." But only you make an investment decision since your opponent does not participate in investment. Thus this table is the same as the first row of "Payoff Table 1" (the rectangular area with bold outlines in the following table) for the case in which your opponent's investment number is 0.

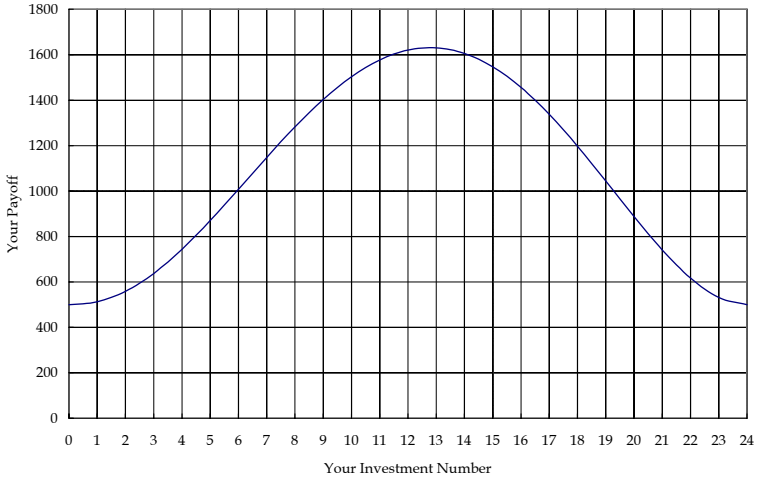
Payoff Table 1 (for Practice) O O

		Your Investment Number																						
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
	0	500	513	558	637	743	870	1007	1148	1282	1403	1503	1577	1621	1631	1606	1547	1456	1338	1198	1045	888	741	617	531	500
	1	514	564	651	769	911	1067	1228	1386	1531	1656	1754	1821	1852	1845	1800	1718	1602	1458	1292	1114	936	769	630	535	500
	2	570	665	796	954	1130	1314	1496	1667	1820	1945	2038	2094	2109	2081	2013	1904	1761	1588	1394	1189	986	798	643	538	500
Your	**3**	680	824	1000	1196	1404	1613	1813	1995	2150	2272	2356	2396	2391	2340	2244	2106	1931	1727	1502	1268	1039	830	658	542	500
Opponent's	**4**	854	1047	1266	1500	1737	1967	2181	2369	2524	2638	2708	2729	2700	2621	2494	2323	2114	1875	1617	1353	1096	863	673	545	500
Investment	**5**	1097	1340	1600	1867	2130	2379	2602	2792	2942	3044	3096	3093	3036	2925	2763	2556	2310	2034	1740	1442	1156	898	689	550	500
Number	**6**	1416	1705	2004	2302	2587	2849	3078	3266	3405	3491	3520	3490	3400	3253	3053	2805	2518	2202	1870	1537	1219	935	706	554	500
	7	1815	2148	2483	2807	3110	3381	3610	3790	3915	3980	3981	3918	3792	3605	3362	3071	2740	2381	2008	1637	1285	973	723	558	500
	8	2299	2673	3039	3385	3701	3976	4201	4368	4473	4512	4481	4381	4213	3981	3692	3353	2975	2570	2153	1742	1355	1014	742	563	500
	9	2871	3282	3675	4039	4362	4635	4850	5000	5080	5087	5019	4877	4663	4383	4043	3653	3224	2770	2306	1853	1428	1057	761	568	500
	10	3536	3978	4393	4769	5095	5362	5561	5688	5737	5707	5596	5407	5143	4809	4415	3969	3486	2980	2467	1969	1505	1101	781	573	500
	11	4296	4766	5197	5580	5902	6156	6335	6432	6446	6373	6214	5973	5653	5262	4808	4304	3762	3200	2636	2090	1586	1148	803	578	500
	12	5156	5647	6089	6472	6785	7020	7172	7234	7206	7085	6873	6574	6194	5740	5223	4656	4053	3432	2813	2217	1670	1196	824	584	500
	13	6117	6624	7071	7447	7745	7956	8074	8095	8018	7844	7573	7212	6766	6245	5660	5026	4358	3675	2998	2350	1757	1247	847	589	500
	14	7183	7699	8144	8509	8784	8963	9042	9016	8885	8651	8316	7886	7370	6777	6120	5414	4677	3928	3191	2488	1848	1299	871	595	500
	15	8357	8875	9312	9658	9904	10045	10077	9997	9806	9506	9101	8598	8005	7335	6602	5820	5011	4193	3392	2633	1943	1354	896	601	500
	16	9641	10155	10576	10896	11106	11202	11181	11041	10783	10411	9930	9347	8673	7922	7107	6246	5359	4470	3602	2783	2042	1410	921	608	500
	17	11037	11540	11939	12225	12392	12436	12355	12147	11816	11366	10802	10135	9375	8536	7635	6690	5723	4758	3820	2938	2144	1469	948	614	500
	18	12549	13033	13401	13646	13763	13748	13599	13318	12907	12371	11719	10961	10109	9178	8186	7153	6102	5057	4047	3100	2250	1530	975	621	500
	19	14178	14635	14965	15161	15220	15138	14915	14552	14055	13428	12682	11827	10877	9849	8761	7636	6496	5368	4282	3268	2360	1593	1003	628	500
	20	15926	16348	16632	16772	16765	16609	16304	15853	15262	14537	13690	12732	11679	10549	9360	8138	6905	5691	4526	3442	2474	1658	1033	635	500
	21	17796	18175	18405	18480	18399	18161	17766	17220	16528	15699	14744	13678	12516	11277	9984	8659	7330	6026	4779	3622	2591	1725	1063	643	500
	22	19790	20117	20284	20287	20124	19795	19304	18654	17854	16914	15845	14664	13387	12035	10631	9201	7771	6374	5041	3808	2713	1795	1094	651	500
	23	21910	22176	22272	22193	21940	21513	20916	20156	19241	18182	16993	15691	14294	12823	11304	9762	8228	6733	5311	4000	2839	1867	1126	659	500
	24	24157	24354	24369	24201	23849	23315	22606	21727	20690	19506	18190	16760	15236	13641	12001	10344	8701	7104	5591	4199	2968	1941	1159	667	500

Instructions for "Supplemental Payoff Table 2-1" are the same as for "Supplemental Payoff Table 1-1."

In "Supplemental Payoff Table 2-2", the horizontal axis stands for "Your Investment Number" and the vertical axis denotes "Your Payoff." This table illustrates how much "Your Payoff" is, depending on "Your Investment Number."

Supplemental Payoff Table 2-2 (for Practice) O ×



(3) Instructions for "Payoff Table 3," "Supplemental Payoff Table 3-1," and "Supplemental Payoff Table 3-2."

Please use "Payoff Table 3" if the symbol × is written in the cell of "Participation in Investment"-"You" and the symbol O is in the cell of "Participation in Investment"-"Your Opponent" in the "Record Sheet." The way of seeing this table is the same as for "Payoff Table 1." But only your opponent makes an investment decision since you do not participate in investment. This table is the same as the first column of "Payoff Table 1" (the rectangular area with bold outlines in the following table) for the case in which your investment number is 0.

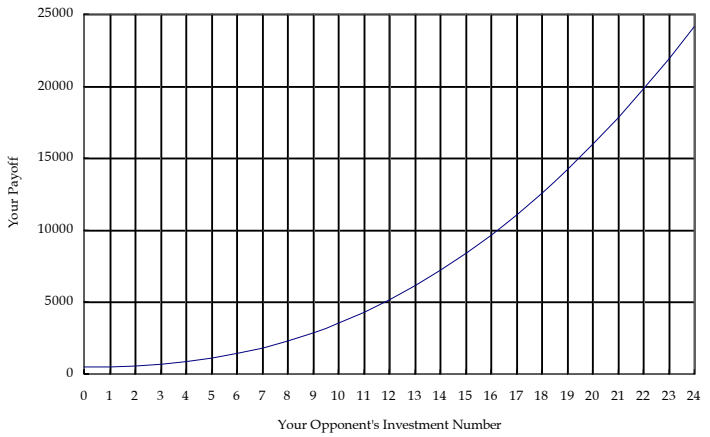
Payoff Table 1 (for Practice) O O

		Your Investment Number																							
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
	0	500	513	558	637	743	870	1007	1148	1282	1403	1503	1577	1621	1631	1606	1547	1456	1338	1198	1045	888	741	617	531	500
	1	514	564	651	769	911	1067	1228	1386	1531	1656	1754	1821	1852	1845	1800	1718	1602	1458	1292	1114	936	769	630	535	500
	2	570	665	796	954	1130	1314	1496	1667	1820	1945	2038	2094	2109	2081	2013	1904	1761	1588	1394	1189	986	798	643	538	500
Your	**3**	680	824	1000	1196	1404	1613	1813	1995	2150	2272	2356	2396	2391	2340	2244	2106	1931	1727	1502	1268	1039	830	658	542	500
Opponent's	**4**	854	1047	1266	1500	1737	1967	2181	2369	2524	2638	2708	2729	2700	2621	2494	2323	2114	1875	1617	1353	1096	863	673	545	500
Investment	**5**	1097	1340	1600	1867	2130	2379	2602	2792	2942	3044	3096	3093	3036	2925	2763	2556	2310	2034	1740	1442	1156	898	689	550	500
Number	**6**	1416	1705	2004	2302	2587	2849	3078	3266	3405	3491	3520	3490	3400	3253	3053	2805	2518	2202	1870	1537	1219	935	706	554	500
	7	1815	2148	2483	2807	3110	3381	3610	3790	3915	3980	3981	3918	3792	3605	3362	3071	2740	2381	2008	1637	1285	973	723	558	500
	8	2299	2673	3039	3385	3701	3976	4201	4368	4473	4512	4481	4381	4213	3981	3692	3353	2975	2570	2153	1742	1355	1014	742	563	500
	9	2871	3282	3675	4039	4362	4635	4850	5000	5080	5087	5019	4877	4663	4383	4043	3653	3224	2770	2306	1853	1428	1057	761	568	500
	10	3536	3978	4393	4769	5095	5362	5561	5688	5737	5707	5596	5407	5143	4809	4415	3969	3486	2980	2467	1969	1505	1101	781	573	500
	11	4296	4766	5197	5580	5902	6156	6335	6432	6446	6373	6214	5973	5653	5262	4808	4304	3762	3200	2636	2090	1586	1148	803	578	500
	12	5156	5647	6089	6472	6785	7020	7172	7234	7206	7085	6873	6574	6194	5740	5223	4656	4053	3432	2813	2217	1670	1196	824	584	500
	13	6117	6624	7071	7447	7745	7956	8074	8095	8018	7844	7573	7212	6766	6245	5660	5026	4358	3675	2998	2350	1757	1247	847	589	500
	14	7183	7699	8144	8509	8784	8963	9042	9016	8885	8651	8316	7886	7370	6777	6120	5414	4677	3928	3191	2488	1848	1299	871	595	500
	15	8357	8875	9312	9658	9904	10045	10077	9997	9806	9506	9101	8598	8005	7335	6602	5820	5011	4193	3392	2633	1943	1354	896	601	500
	16	9641	10155	10576	10896	11106	11202	11181	11041	10783	10411	9930	9347	8673	7922	7107	6246	5359	4470	3602	2783	2042	1410	921	608	500
	17	11037	11540	11939	12225	12392	12436	12355	12147	11816	11366	10802	10135	9375	8536	7635	6690	5723	4758	3820	2938	2144	1469	948	614	500
	18	12549	13033	13401	13646	13763	13748	13599	13318	12907	12371	11719	10961	10109	9178	8186	7153	6102	5057	4047	3100	2250	1530	975	621	500
	19	14178	14635	14965	15161	15220	15138	14915	14552	14055	13428	12682	11827	10877	9849	8761	7636	6496	5368	4282	3268	2360	1593	1003	628	500
	20	15926	16348	16632	16772	16765	16609	16304	15853	15262	14537	13690	12732	11679	10549	9360	8138	6905	5691	4526	3442	2474	1658	1033	635	500
	21	17796	18175	18405	18480	18399	18161	17766	17220	16528	15699	14744	13678	12516	11277	9984	8659	7330	6026	4779	3622	2591	1725	1063	643	500
	22	19790	20117	20284	20287	20124	19795	19304	18654	17854	16914	15845	14664	13387	12035	10631	9201	7771	6374	5041	3808	2713	1795	1094	651	500
	23	21910	22176	22272	22193	21940	21513	20916	20156	19241	18182	16993	15691	14294	12823	11304	9762	8228	6733	5311	4000	2839	1867	1126	659	500
	24	24157	24354	24369	24201	23849	23315	22606	21727	20690	19506	18190	16760	15236	13641	12001	10344	8701	7104	5591	4199	2968	1941	1159	667	500

Instructions for "Supplemental Payoff Table 3-1" are the same as for "Supplemental Payoff Table 1-1."

In "Supplemental Payoff Table 3-2", the horizontal axis stands for "Your Opponent's Investment Number" and the vertical axis denotes "Your Payoff." This table illustrates how much "Your Payoff" is, depending on "Your Opponent's Investment Number."

Supplemental Payoff Table 3-2 (for Practice) × O



Finally let us consider the case in which the symbol × is in both the cell of "Participation in Investment"-"You" and the cell of "Participation in Investment-"Your Opponent." In this case, neither you nor your opponent can make an investment since both choose "Nor Participate" in investment. Therefore your payoff is 500, the number in the cell in which both "Your Investment Number" and "Your Opponent's Investment Number" are 0. In the actual experiment, this value is 706.

This is the end of instructions for payoff tables.

2.4. Participation Card

The Actual Experiment

Your opponent's ID number is [ ] Period 1

Do you participate in investment? Please circle one of the following:

· Participate

· Not Participate

Your ID number is _____.

2.5. Investment Card

The Actual Experiment

Your opponent's ID number is [ ] Period 1

Please circle your investment number. (please circle "Not Participate" if you do not participate in investment.)

Not Participate

0 1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17 18 19 20 21 22 23 24

Your ID number is _____.

2.6. Record Sheet

Practice 1 (White "Participation Card" and White "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participa-tion in investment (write O or ×)	↓ Fill out if O is in the above cell ↓	→ ↓ Fill out if O is in the above cell ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 500	
			Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Practice 2 (Red "Participation Card" and Red "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participa-tion in investment (write O or ×)	↓ Fill out if O is in the above cell ↓	→ ↓ Fill out if O is in the above cell ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 500	
			Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Practice 3 (Blue "Participation Card" and Blue "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participa-tion in investment (write O or ×)	↓ Fill out if O is in the above cell ↓	→ ↓ Fill out if O is in the above cell ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 500	
			Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Practice 4 (Yellow "Participation Card" and Yellow "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 500	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

* Please note that in the actual experiment, your payoff is 706 when × is in both the cell of "Participation in Investment"-"You" and the cell of "Participation in Investment"-"Your Opponent."

Period 1 of the Actual Experiment (White "Participation Card" and White "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 2 of the Actual Experiment (Red "Participation Card" and Red "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 3 of the Actual Experiment (Blue "Participation Card" and Blue "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 4 of the Actual Experiment (Yellow "Participation Card" and Yellow "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 5 of the Actual Experiment (White "Participation Card" and White "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 6 of the Actual Experiment (Red "Participation Card" and Red "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	↓ Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 7 of the Actual Experiment (Blue "Participation Card" and Blue "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	↓ Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 8 of the Actual Experiment (Yellow "Participation Card" and Yellow "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	↓ Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 9 of the Actual Experiment (White "Participation Card" and White "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	↓ Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 10 of the Actual Experiment (Red "Participation Card" and Red "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	↓ Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 11 of the Actual Experiment (Blue "Participation Card" and Blue "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	↓ Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

B

Period 12 of the Actual Experiment (Yellow "Participation Card" and Yellow "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 13 of the Actual Experiment (White "Participation Card" and White "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Period 14 of the Actual Experiment (Red "Participation Card" and Red "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

B

Period 15 of the Actual Experiment (Blue "Participation Card" and Blue "Investment Card")

	You	Your Opponent	Payoff Table (color)	The Reason for Your Decision on Participation (please specify the reason why you participate in investment or why you do not participate).
Participation in investment (write O or ×)	↓	→ ↓	O O Payoff Table 1 (Red) O × Payoff Table 2 (Blue) × O Payoff Table 3 (Yellow) × × 706	
	Fill out if O is in the above cell ↓	Fill out if O is in the above cell ↓	Your Payoff	The Reason for Your Decision on Investment Number (Please specify your expectation on your opponent's investment number and the reason why you chose your investment number.)
Investment Number 0 ~ 24				

Your ID Number is

2.7. Questionnaires on the Experiment

ID Number

Please answer the following questions.

(1) Did you understand the rules of the experiment? Please circle one of the numbers of the following answers. If you choose 2, circle either "Practice" or "Actual Experiment" and write the number of period from which you have understood the rules.

1. I have understood the rules from the beginning of the experiment.
2. I have understood the rules from a middle of the experiment:
   From period ( ) in Practice・Actual Experiment
3. I could not understand the rules.

(2) Did you understand the three kinds of payoff tables? Please circle one of the numbers of the following answers. If you choose 2, write the numbers of the payoff tables that you could not understand.

1. I understood all three tables.
2. I could not understand payoff table ( ).

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number? Please answer these questions concretely as much as you can.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions? Choose one of the following.

1. It is desirable that my payoff is as high, regardless of my opponent's payoff.
2. If my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small.
3. It is desirable that both my payoff and my opponent's payoff are as high as possible.
4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.
5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff.
6. Others (please specify).

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment? Please choose one of the following and write the reasons for your decisions on participation as concretely as possible.

1. I always participated in investment.
2. I never participated in investment.
3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.
4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

(6) How did you choose your investment number when you participated in investment? Please answer the question both in the case in which your opponent participated in investment and the case in which your opponent did not.

When your opponent participated in investment:

When your opponent did not participate in investment:

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why? Please answer these questions as concretely as you can.

Please confirm that your ID number is filled in again.

Thank you very much.

B

2.8a. Payoff Table 1 (for Practice)

Your Investment Number

Your Opponent's Investment Number / Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	500	513	558	637	743	870	1007	1148	1282	1403	1503	1577	1621	1631	1606	1547	1456	1338	1198	1045	888	741	617	531	500
1	514	564	651	769	911	1067	1228	1386	1531	1656	1754	1821	1852	1845	1800	1718	1602	1458	1292	1114	936	769	630	535	500
2	570	665	796	954	1130	1314	1496	1667	1820	1945	2038	2094	2109	2081	2013	1904	1761	1588	1394	1189	986	798	643	538	500
3	680	824	1000	1196	1404	1613	1813	1995	2150	2272	2356	2396	2391	2340	2244	2106	1931	1727	1502	1268	1039	830	658	542	500
4	854	1047	1266	1500	1737	1967	2181	2369	2524	2638	2708	2729	2700	2621	2494	2323	2114	1875	1617	1353	1096	863	673	545	500
5	1097	1340	1600	1867	2130	2379	2602	2792	2942	3044	3096	3093	3036	2925	2763	2556	2310	2034	1740	1442	1156	898	689	550	500
6	1416	1705	2004	2302	2587	2849	3078	3266	3405	3491	3520	3490	3400	3253	3053	2805	2518	2202	1870	1537	1219	935	706	554	500
7	1815	2148	2483	2807	3110	3381	3610	3790	3915	3980	3981	3918	3792	3605	3362	3071	2740	2381	2008	1637	1285	973	723	558	500
8	2299	2673	3039	3385	3701	3976	4201	4368	4473	4512	4481	4381	4213	3981	3692	3353	2975	2570	2153	1742	1355	1014	742	563	500
9	2871	3282	3675	4039	4362	4635	4850	5000	5080	5087	5019	4877	4663	4383	4043	3653	3224	2770	2306	1853	1428	1057	761	568	500
10	3536	3978	4393	4769	5095	5362	5561	5688	5737	5707	5596	5407	5143	4809	4415	3969	3486	2980	2467	1969	1505	1101	781	573	500
11	4296	4766	5197	5580	5902	6156	6335	6432	6446	6373	6214	5973	5653	5262	4808	4304	3762	3200	2636	2090	1586	1148	803	578	500
12	5156	5647	6089	6472	6785	7020	7172	7234	7206	7085	6873	6574	6194	5740	5223	4656	4053	3432	2813	2217	1670	1196	824	584	500
13	6117	6624	7071	7447	7745	7956	8074	8095	8018	7844	7573	7212	6766	6245	5660	5026	4358	3675	2998	2350	1757	1247	847	589	500
14	7183	7699	8144	8509	8784	8963	9042	9016	8885	8651	8316	7886	7370	6777	6120	5414	4677	3928	3191	2488	1848	1299	871	595	500
15	8357	8875	9312	9658	9904	10045	10077	9997	9806	9506	9101	8598	8005	7335	6602	5820	5011	4193	3392	2633	1943	1354	896	601	500
16	9641	10155	10576	10896	11106	11202	11181	11041	10783	10411	9930	9347	8673	7922	7107	6246	5359	4470	3602	2783	2042	1410	921	608	500
17	11037	11540	11939	12225	12392	12436	12355	12147	11816	11366	10802	10135	9375	8536	7635	6690	5723	4758	3820	2938	2144	1469	948	614	500
18	12549	13033	13401	13646	13763	13748	13599	13318	12907	12371	11719	10961	10109	9178	8186	7153	6102	5057	4047	3100	2250	1530	975	621	500
19	14178	14635	14965	15161	15220	15138	14915	14552	14055	13428	12682	11827	10877	9849	8761	7636	6496	5368	4282	3268	2360	1593	1003	628	500
20	15926	16348	16632	16772	16765	16609	16304	15853	15262	14537	13690	12732	11679	10549	9360	8138	6905	5691	4526	3442	2474	1658	1033	635	500
21	17796	18175	18405	18480	18399	18161	17766	17220	16528	15699	14744	13678	12516	11277	9984	8659	7330	6026	4779	3622	2591	1725	1063	643	500
22	19790	20117	20284	20287	20124	19795	19304	18654	17854	16914	15845	14664	13387	12035	10631	9201	7771	6374	5041	3808	2713	1795	1094	651	500
23	21910	22176	22272	22193	21940	21513	20916	20156	19241	18182	16993	15691	14294	12823	11304	9762	8228	6733	5311	4000	2839	1867	1126	659	500
24	24157	24354	24369	24201	23849	23315	22606	21727	20690	19506	18190	16760	15236	13641	12001	10344	8701	7104	5591	4199	2968	1941	1159	667	500

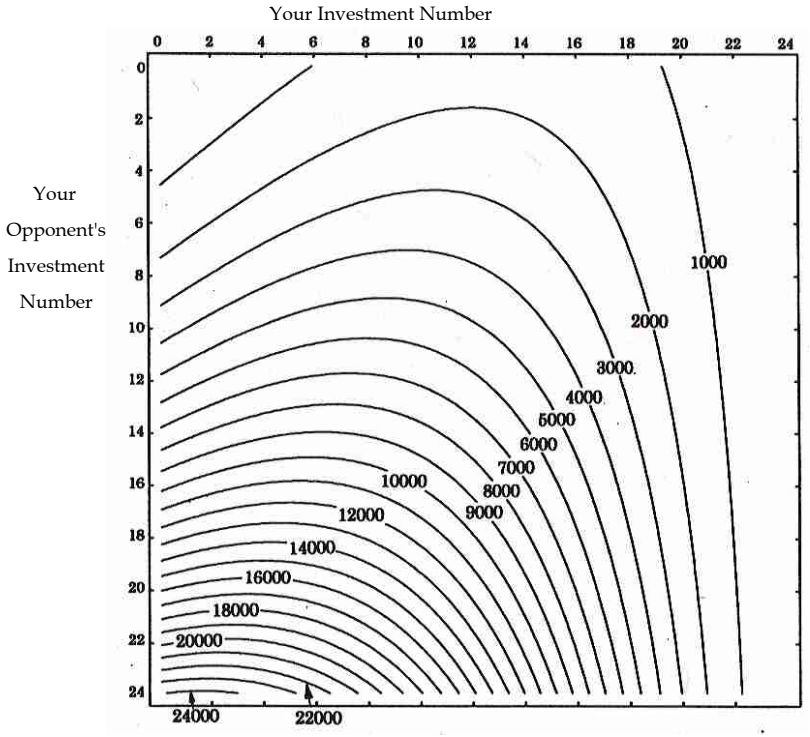
2.8b. Supplemental Payoff Table 1-1 (for Practice)

Your Investment Number

Your Opponent's Investment Number / Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0																									
1																									
2			712			1216			1688			1959			1903			1521			967			558	
3																									
4																									
5			1500			2390			2941			3086			2755			2031			1166			580	
6																									
7																									
8			2876			3981			4467			4369			3683			2570			1372			602	
9																									
10																									
11			4990			6154			6434			5959			4798			3203			1609			627	
12																									
13																									
14			7916			8954			8869			7870			6111			3936			1880			656	
15																									
16																									
17			11720			12420			11796			10117			7628			4771			2185			687	
18																									
19																									
20			16456			16586			15237			12714			9357			5712			2526			723	
21																									
22																									
23			22176			21485			19214			15673			11305			6762			2903			762	
24																									

2.8c. Supplemental Payoff Table 1-2 (for practice) O O

B



2.8d. Payoff Table 2 (for Practice) ○ ×

B

Your Investment Number

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Your Payoff	500	513	558	637	743	870	1007	1148	1282	1403	1503	1577	1621	1631	1606	1547	1456	1338	1198	1045	888	741	617	531	500

2.8e. Supplemental Payoff Table 2-1 (for Practice) ○ ×

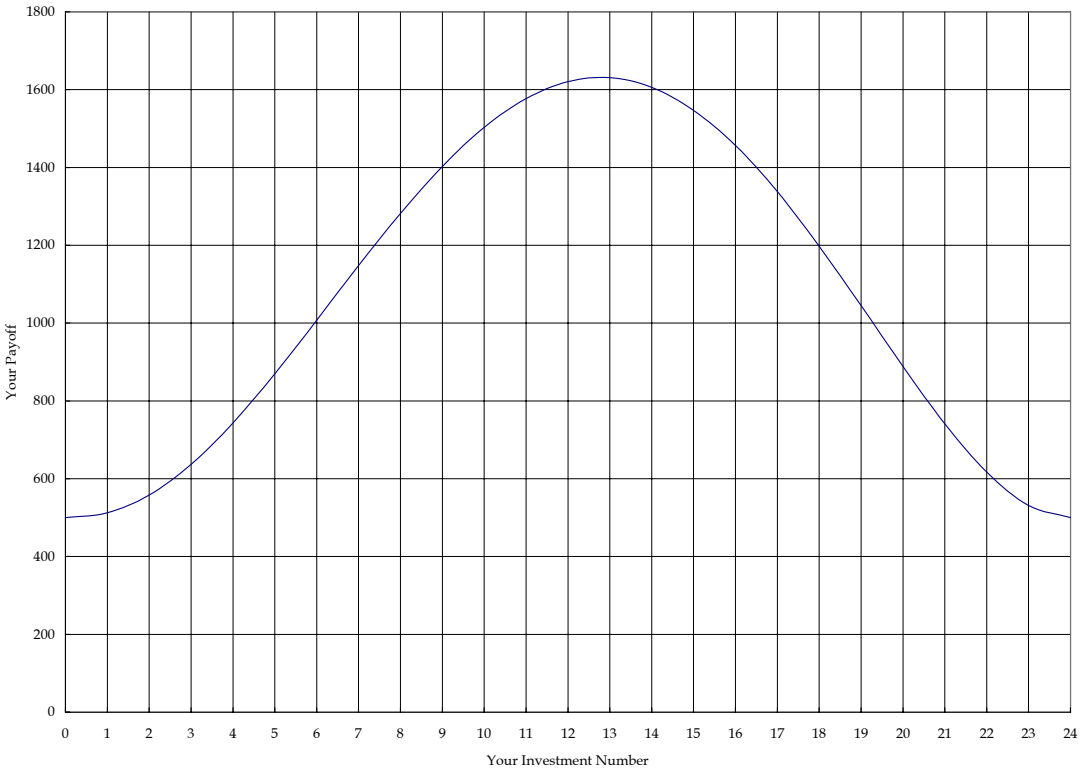
B

Your Investment Number

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Your Payoff	552				873			1277			1567			1595			1331			891			549		

2.8f. Supplemental Payoff Table 2-2 (for Practice) ○×

B



2.8g. Payoff Table 3 (for Practice) × ○

B

Your Opponent's Investment Number	Your Payoff
0	500
1	514
2	570
3	680
4	854
5	1097
6	1416
7	1815
8	2299
9	2871
10	3536
11	4296
12	5156
13	6117
14	7183
15	8357
16	9641
17	11037
18	12549
19	14178
20	15926
21	17796
22	19790
23	21910
24	24157

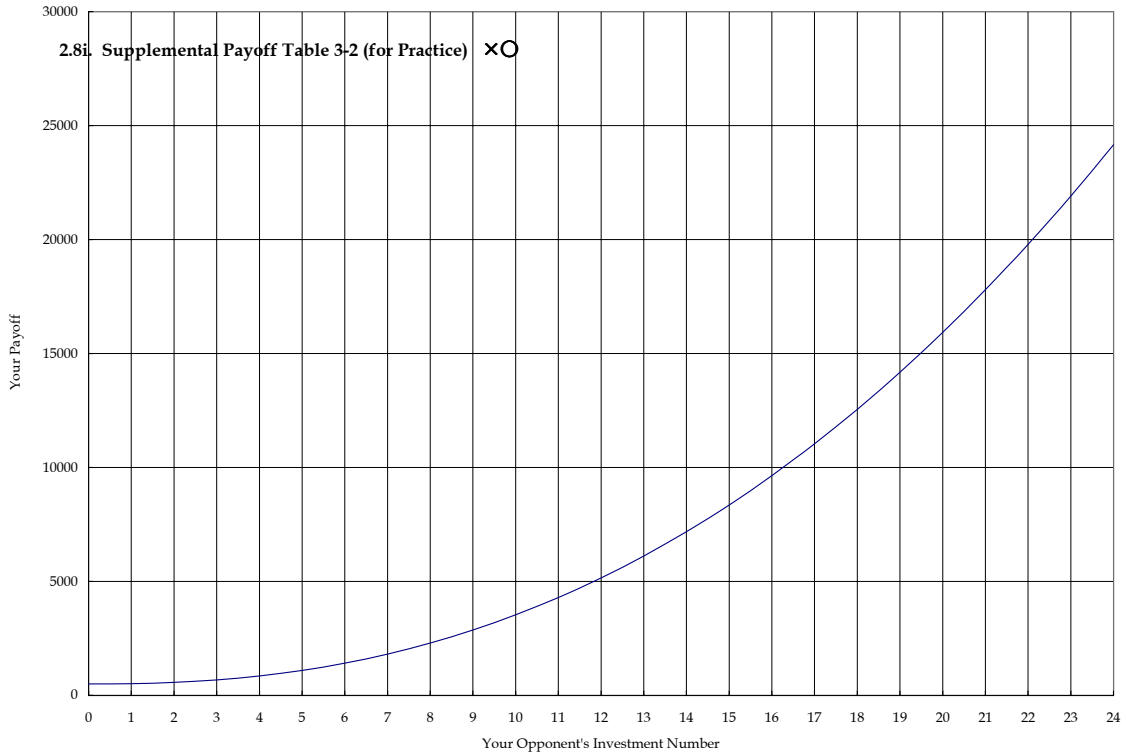
2.8h. Supplemental Payoff Table 3-1 (for Practice) × ○

B

Your Opponent's Investment Number	Your Payoff
0	
1	
2	566
3	
4	
5	1123
6	
7	
8	2328
9	
10	
11	4329
12	
13	
14	7219
15	
16	
17	11076
18	
19	
20	15967
21	
22	
23	21952
24	

B

2.8i. Supplemental Payoff Table 3-2 (for Practice) ×○



2.8j. Payoff Table 1 (for the Actual Experiment) ○ ○

B

Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	706	871	1072	1297	1536	1775	2003	2210	2386	2523	2615	2658	2648	2585	2470	2309	2106	1871	1614	1349	1091	858	669	543	500
1	905	1127	1379	1647	1919	2183	2427	2641	2816	2944	3019	3039	3001	2905	2755	2555	2313	2038	1743	1443	1154	894	685	548	500
2	1186	1465	1764	2072	2374	2658	2913	3129	3297	3411	3465	3456	3385	3252	3061	2819	2534	2217	1881	1543	1220	933	703	552	500
3	1554	1888	2232	2575	2902	3202	3463	3675	3831	3925	3952	3911	3801	3626	3391	3102	2770	2406	2027	1648	1290	973	721	556	500
4	2017	2401	2787	3160	3508	3817	4078	4281	4420	4488	4483	4403	4250	4028	3743	3404	3020	2608	2181	1759	1363	1015	740	561	500
5	2578	3010	3432	3831	4193	4507	4762	4950	5064	5101	5057	4934	4733	4459	4119	3725	3287	2821	2344	1877	1441	1060	760	566	500
6	3244	3718	4171	4590	4960	5272	5515	5681	5766	5765	5677	5504	5249	4918	4519	4065	3568	3045	2516	2000	1522	1106	781	571	500
7	4018	4529	5008	5440	5812	6115	6339	6478	6526	6481	6343	6114	5800	5406	4944	4425	3866	3282	2696	2129	1607	1155	802	576	500
8	4904	5447	5944	6383	6751	7038	7237	7340	7345	7250	7056	6765	6385	5924	5393	4806	4179	3532	2886	2265	1696	1206	825	582	500
9	5907	6475	6984	7422	7779	8043	8209	8271	8225	8073	7816	7458	7007	6472	5867	5207	4508	3793	3084	2407	1789	1259	849	588	500
10	7031	7616	8130	8561	8897	9132	9257	9270	9168	8951	8624	8193	7664	7051	6367	5628	4854	4067	3292	2555	1886	1315	874	594	500
11	8278	8873	9384	9800	10109	10306	10384	10339	10173	9886	9482	8970	8359	7661	6892	6070	5217	4354	3509	2710	1987	1372	899	600	500
12	9653	10250	10750	11142	11416	11567	11589	11480	11242	10877	10390	9791	9090	8302	7444	6534	5596	4654	3736	2871	2092	1432	926	606	500
13	11158	11749	12229	12589	12820	12916	12875	12694	12376	11925	11349	10656	9860	8976	8022	7019	5992	4967	3972	3039	2201	1494	953	613	500
14	12796	13372	13824	14144	14323	14356	14243	13982	13576	13033	12358	11565	10667	9681	8627	7526	6406	5292	4217	3213	2315	1559	982	620	500
15	14570	15123	15538	15808	15925	15888	15694	15344	14844	14199	13420	12520	11514	10419	9258	8055	6836	5631	4473	3394	2433	1626	1012	627	500
16	16484	17003	17372	17583	17630	17513	17229	16783	16179	15426	14535	13521	12399	11191	9918	8606	7285	5984	4738	3582	2555	1695	1042	635	500
17	18539	19016	19328	19471	19439	19232	18850	18299	17583	16714	15704	14568	13324	11995	10605	9180	7751	6350	5013	3777	2681	1767	1074	642	500
18	20739	21163	21409	21474	21353	21047	20559	19893	19057	18064	16926	15661	14290	12834	11320	9776	8235	6730	5298	3978	2812	1841	1107	650	500
19	23086	23447	23617	23594	23374	22960	22355	21566	20602	19476	18203	16803	15296	13706	12063	10395	8737	7123	5593	4187	2947	1917	1141	659	500
20	25583	25870	25954	25832	25504	24972	24241	23319	22218	20951	19536	17992	16342	14614	12835	11038	9257	7531	5899	4403	3087	1996	1176	667	500
21	28231	28433	28420	28190	27743	27083	26217	25154	23907	22491	20924	19230	17431	15556	13636	11704	9796	7953	6214	4625	3231	2078	1212	676	500
22	31034	31141	31020	30670	30094	29296	28285	27071	25669	24095	22370	20516	18561	16533	14465	12393	10354	8388	6540	4855	3380	2162	1249	685	500
23	33993	33993	33753	33273	32557	31611	30445	29071	27505	25764	23872	21852	19733	17546	15325	13106	10930	8838	6877	5092	3533	2248	1287	694	500
24	37111	36993	36622	36001	35135	34030	32699	31155	29416	27500	25432	23239	20949	18595	16214	13843	11525	9303	7224	5337	3691	2337	1326	703	500

Your Opponent's Investment Number

2.8k. Supplemental Payoff Table 1-1 (for the Actual Experiment ○ ○

B

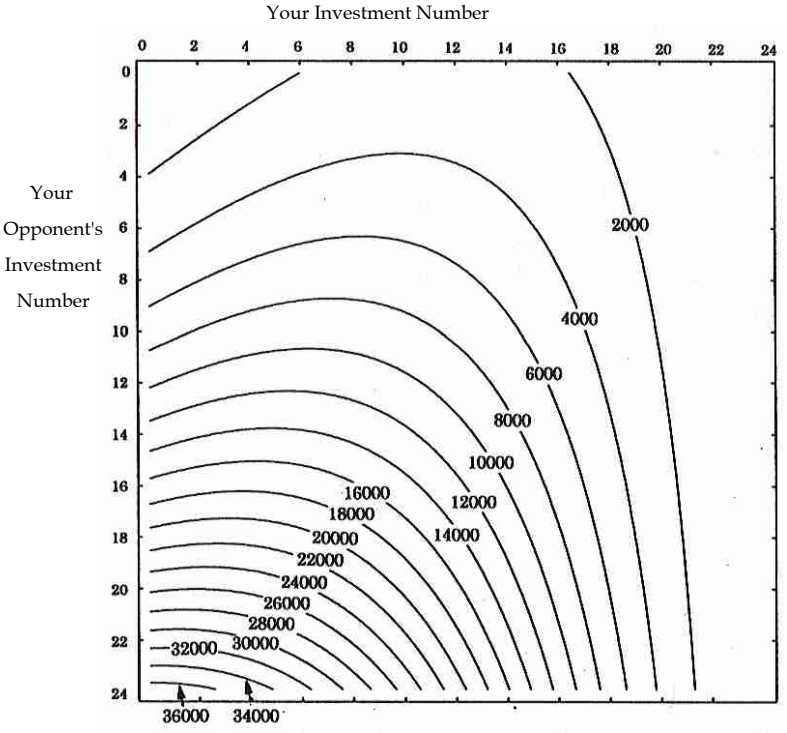
Your Investment Number

Your Payoff	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0																									
1																									
2			1484			2446			3066			3246			2902			2127			1200			581	
3																									
4																									
5			3245			4512			5057			4921			4109			2821			1460			609	
6																									
7																									
8			5705			7036			7332			6749			5383			3536			1724			636	
9																									
10																									
11			9122			10295			10154			8952			6883			4364			2024			667	
12																									
13																									
14			13575			14338			13553			11545			8620			5310			2364			701	
15																									
16																									
17			19132			19206			17555			14548			10603			6376			2743			739	
18																									
19																									
20			25855			24939			22187			17973			12838			7567			3163			781	
21																									
22																									
23			33800			31573			27472			21836			15336			8887			3626			827	
24																									

Your Opponent's Investment Number

2.8l. Supplemental Payoff Table 1-2 (for the Actual Experiment) O O

B



2.8m. Payoff Table 2 (for the Actual Experiment) ○ ×

B

Your Investment Number

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Your Payoff	706	871	1072	1297	1536	1775	2003	2210	2386	2523	2615	2658	2648	2585	2470	2309	2106	1871	1614	1349	1091	858	669	543	500

2.8n. Supplemental Payoff Table 2-1 (for the Actual Experiment) ○ ×

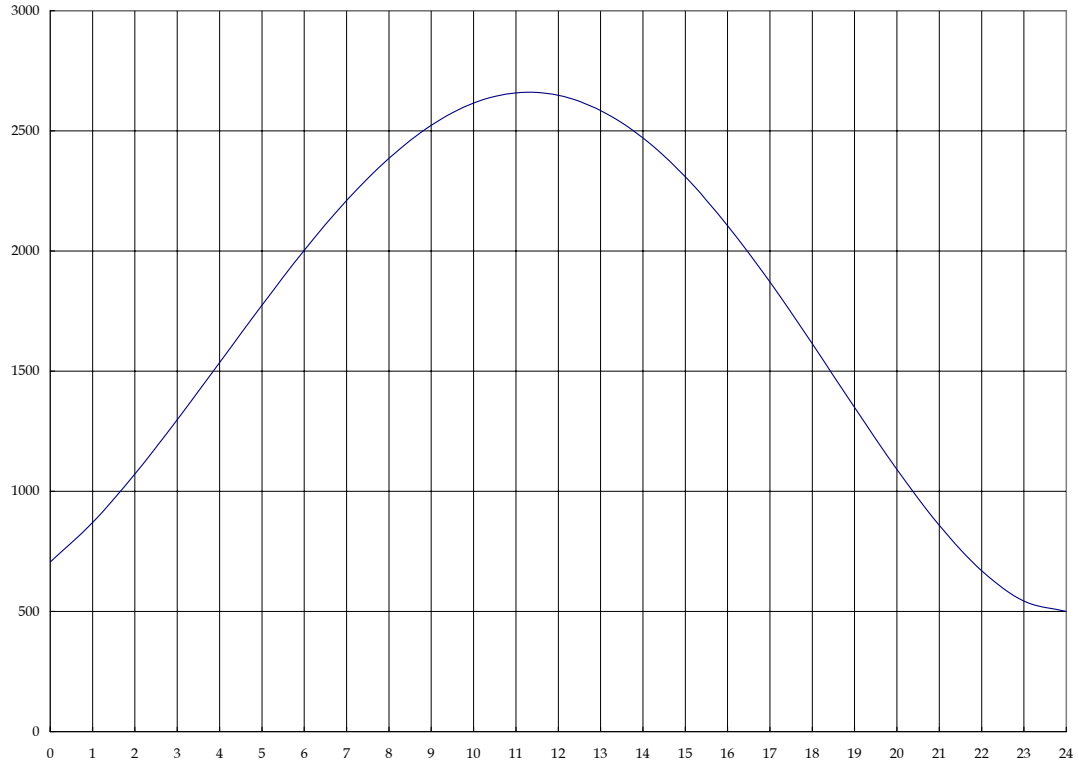
B

Your Investment Number

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Your Payoff	986			<	1771		<	2373		<	2640		>	2455		>	1864		>	1100		>	571		

2.8o. Supplemental Payoff Table 2-2 (for the Actual Experiment) ○ ×

B



2.8p. Payoff Table 3 (for the Actual Experiment × ○

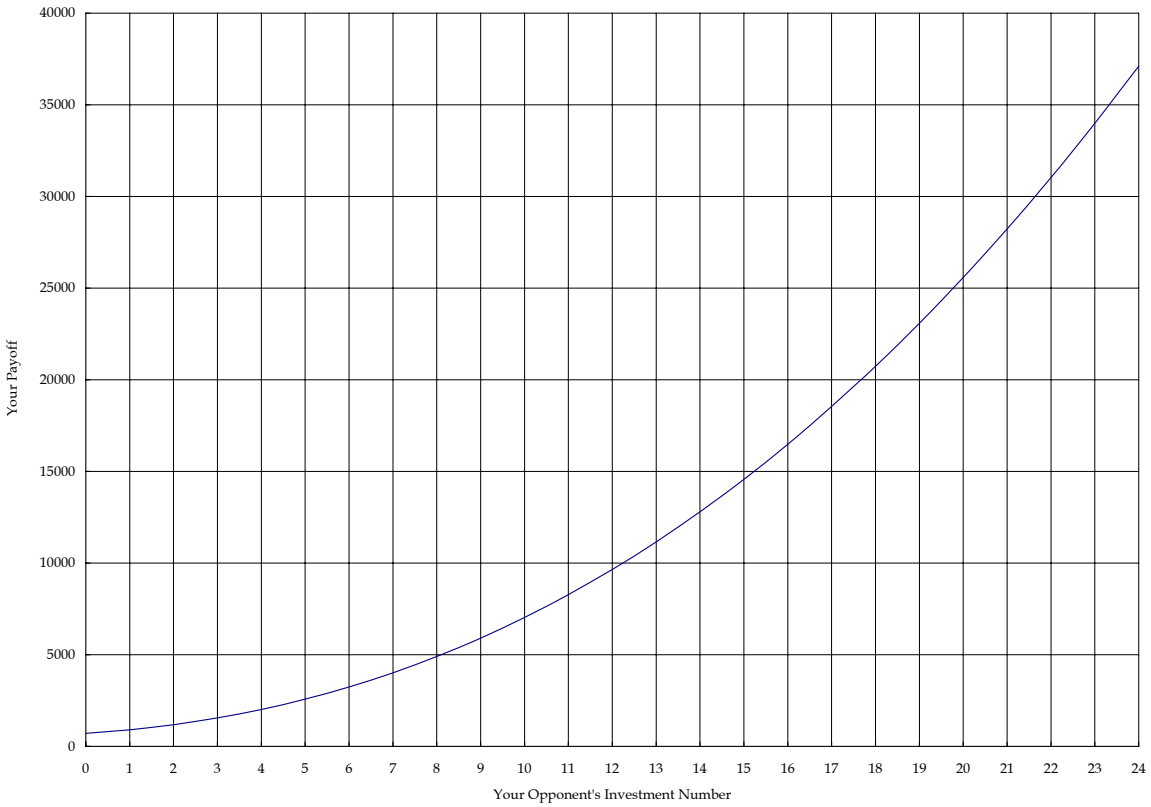
B

Your Opponent's Investment Number	Your Payoff
0	706
1	905
2	1186
3	1554
4	2017
5	2578
6	3244
7	4018
8	4904
9	5907
10	7031
11	8278
12	9653
13	11158
14	12796
15	14570
16	16484
17	18539
18	20739
19	23086
20	25583
21	28231
22	31034
23	33993
24	37111

2.8q. Supplemental Payoff Table 3-1 (for the Actual Experiment) × ○ B

Your Opponent's Investment Number	Your Payoff
0	
1	
2	1088
3	
4	
5	2613
6	
7	
8	4943
9	
10	
11	8321
12	
13	
14	12841
15	
16	
17	18588
18	
19	
20	25633
21	
22	
23	34046
24	

2.8r. Supplemental Payoff Table 3-2 (for the Actual Experiment) ×○ B



3. Data for the Tsukuba Session A

3.1. Pairs of Subjects (ID Numbers)

Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	1,6	1,5	1,10	1,3	1,16	1,8	1,12	1,9	1,11	1,17	1,13	1,18	1,2	1,19	1,4
	2,10	2,8	2,18	2,4	2,11	2,14	2,3	2,16	2,20	2,13	2,5	2,15	3,20	2,17	2,6
	3,9	3,7	3,17	5,20	3,10	3,13	4,20	3,15	3,19	3,12	3,4	3,14	4,19	3,16	3,5
	4,8	4,6	4,16	6,19	4,9	4,12	5,19	4,14	4,18	4,11	6,20	4,13	5,18	4,15	7,20
ID #	5,7	9,20	5,15	7,18	5,8	5,11	6,18	5,13	5,17	5,10	7,19	5,12	6,17	5,14	8,19
	11,20	10,19	6,14	8,17	6,7	6,10	7,17	6,12	6,16	6,9	8,18	6,11	7,16	6,13	9,18
	12,19	11,18	7,13	9,16	12,20	7,9	8,16	7,11	7,15	7,8	9,17	7,10	8,15	7,12	10,17
	13,18	12,17	8,12	10,15	13,19	15,20	9,15	8,10	8,14	14,20	10,16	8,9	9,14	8,11	11,16
	14,17	13,16	9,11	11,14	14,18	16,19	10,14	17,20	9,13	15,19	11,15	16,20	10,13	9,10	12,15
	15,16	14,15	19,20	12,13	15,17	17,18	11,13	18,19	10,12	16,18	12,14	17,19	11,12	18,20	13,14

3.2. Investment Numbers of Each Subject in the Tsukuba A Session

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	8	8	6	7	7	8	3	7	8	8	7	8	9	8	6	9	6	8	8	8
Period 2	7	8	3	7	4	5	3	6	5	8	7	8	8	8	8	9	7	8	10	8
Period 3	8	8	8	8	6	9	3	8	0	8	7	8	7	7	8	9	7	7	9	7
Period 4	8	8	5	8	10	8	3	8	5	8	7	8	8	7	7	7	7	7	8	8
Period 5	6	8	8	8	6	8	3	7	6	8	7	8	8	8	7	9	7	8	8	7
Period 6	7	8	8	7	8	12	3	7	13	8	7	8	7	7	6	9	7	8	12	8
Period 7	8	8	8	7	6	12	3	8	5	8	7	8	7	7	8	6	7	7	12	7
Period 8	6	8	8	8	7	12	3	8	4	8	7	8	8	4	8	6	7	8	3	8
Period 9	7	8	8	8	6	5	3	7	5	8	7	8	8	8	8	7	7	7	4	8
Period 10	6	8	7	7	7	5	3	8	7	8	7	8	6	8	9	7	8	7	4	8
Period 11	7	8	8	7	6	8	3	8	8	7	8	8	7	8	8	6	8	7	4	8
Period 12	7	8	8	7	18	8	3	8	8	8	8	8	6	7	7	6	8	7	5	8
Period 13	7	8	8	8	6	8	3	8	8	8	8	8	8	7	7	7	8	7	8	8
Period 14	7	8	8	8	6	8	3	8	8	8	8	10	8	7	7	7	8	7	8	8
Period 15	7	8	6	8	6	8	3	8	8	8	7	8	8	7	6	5	8	7	6	8

3.3. Investment Numbers of Each Subject's Opponents in the Tsukuba A Session

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	8	8	8	7	3	8	7	7	6	8	8	8	8	6	9	6	8	9	8	7
Period 2	4	6	3	5	7	7	3	8	8	10	8	7	9	8	8	8	8	7	8	5
Period 3	8	7	7	9	8	7	7	8	7	8	0	8	3	9	6	8	8	8	7	9
Period 4	5	8	8	8	8	8	7	7	7	7	7	8	8	7	8	5	8	3	8	10
Period 5	9	7	8	6	7	3	8	6	8	8	8	7	8	8	7	6	7	8	8	8
Period 6	7	7	7	8	7	8	13	7	3	12	8	7	8	8	8	12	8	7	9	6
Period 7	8	8	8	7	12	7	7	6	8	7	7	8	7	8	5	8	3	12	6	7
Period 8	4	6	8	4	8	8	7	8	6	8	3	12	7	8	8	8	8	3	8	7
Period 9	7	8	4	7	7	7	8	8	8	8	7	8	5	7	3	5	6	8	8	8
Period 10	8	6	8	7	8	7	8	3	5	7	7	7	8	8	4	7	6	7	9	8
Period 11	7	6	7	8	8	8	4	7	8	6	8	8	7	8	8	7	8	8	3	8
Period 12	7	7	7	6	8	8	8	8	8	3	8	18	7	8	8	8	5	7	8	6
Period 13	8	7	8	8	7	8	7	7	7	8	8	8	8	8	8	3	8	6	8	8
Period 14	8	8	7	7	7	8	10	8	8	8	8	3	8	6	8	8	8	8	7	7
Period 15	8	8	6	7	6	8	8	6	7	8	5	6	7	8	8	7	8	8	8	3

3.4. Pairs of Investment Numbers in the Tsukuba A Session (boldfaced numbers indicate data of subjects who did spiteful behavior).

Period 1			Period 2			Period 3			Period 4			Period 5			Period 6			Period 7			Period 8		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,6	8	8	1,5	7	4	1,10	8	8	1,3	8	5	1,16	**6**	9	1,8	7	7	1,12	8	8	1,9	**6**	4
2,10	8	8	2,8	8	6	2,18	8	7	2,4	8	8	2,11	8	7	2,14	8	7	2,3	8	8	2,16	8	6
3,9	6	8	3,7	3	**3**	3,17	8	7	5,20	10	8	3,10	8	8	3,13	8	7	4,20	7	7	3,15	8	8
4,8	7	7	4,6	7	5	4,16	8	9	6,19	8	8	4,9	8	6	4,12	7	8	5,19	6	12	4,14	8	**4**
5,7	7	**3**	9,20	5	8	5,15	6	8	7,18	**3**	7	5,8	6	7	5,11	8	7	6,18	12	7	5,13	7	8
11,20	7	8	10,19	8	10	6,14	9	7	8,17	8	7	6,7	8	**3**	6,10	12	8	7,17	**3**	7	6,12	12	8
12,19	8	8	11,18	7	8	7,13	**3**	7	9,16	5	7	12,20	8	7	7,9	**3**	13	8,16	8	6	7,11	**3**	7
13,18	9	8	12,17	8	7	8,12	8	8	10,15	8	7	13,19	8	8	15,20	6	8	9,15	5	8	8,10	8	8
14,17	8	6	13,16	8	9	9,11	0	7	11,14	7	7	14,18	8	8	16,19	9	12	10,14	8	7	17,20	7	8
15,16	6	9	14,15	8	8	19,20	9	7	12,13	8	8	15,17	7	7	17,18	7	8	11,13	7	7	18,19	8	**3**

Period 9			Period 10			Period 11			Period 12			Period 13			Period 14			Period 15		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,11	7	7	1,17	**6**	8	1,13	**7**	7	1,18	**7**	7	1,2	**7**	8	1,19	**7**	8	1,4	**7**	8
2,20	8	8	2,13	8	6	2,5	8	6	2,15	8	7	3,20	8	8	2,17	8	8	2,6	8	8
3,19	8	**4**	3,12	7	8	3,4	8	7	3,14	8	**7**	4,19	8	8	3,16	8	7	3,5	6	6
4,18	8	7	4,11	7	7	6,20	8	8	4,13	7	6	5,18	6	7	4,15	8	7	7,20	**3**	8
5,17	6	7	5,10	7	8	7,19	**3**	**4**	5,12	18	8	6,17	8	8	5,14	6	**7**	8,19	8	6
6,16	5	7	6,9	5	7	8,18	8	7	6,11	8	8	7,16	**3**	7	6,13	8	8	9,18	8	7
7,15	**3**	8	7,8	**3**	8	9,17	8	8	7,10	**3**	8	8,15	8	7	7,12	**3**	10	10,17	8	8
8,14	7	8	14,20	8	8	10,16	7	6	8,9	8	8	9,14	8	**7**	8,11	8	8	11,16	7	5
9,13	5	8	15,19	9	**4**	11,15	8	8	16,20	6	8	10,13	8	8	9,10	8	8	12,15	8	6
10,12	8	8	16,18	7	7	12,14	8	8	17,19	8	**5**	11,12	8	8	18,20	7	8	13,14	8	**7**

3.5. Payoffs of Each Subject in the Tsukuba A Session

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	7345	7345	7237	6478	3675	7345	5440	6478	5766	7345	7340	7345	7250	5766	8209	5765	7237	8225	7345	6526
Period 2	4281	5766	2575	4950	5812	6115	2575	7237	7038	9168	7340	6526	8225	7345	7345	7250	7340	6526	7056	5064
Period 3	7345	6526	6526	8225	7237	6481	5440	7345	4018	7345	2210	7345	3675	8271	5766	7250	7340	7340	6481	8271
Period 4	5064	7345	7038	7345	7056	7345	5440	6526	6115	6526	6478	7345	7345	6478	7340	4950	7340	3675	7345	9168
Period 5	8209	6526	7345	5766	6339	3831	6383	5681	7237	7345	7340	6526	7345	7345	6478	5765	6478	7345	7345	7340
Period 6	6478	6526	6526	7340	6526	6385	12589	6478	3626	11242	7340	6526	7340	7340	7237	10877	7340	6526	7007	5766
Period 7	7345	7345	7345	6478	11589	5800	5440	5766	7038	6526	6478	7345	6478	7340	5064	7237	3675	11480	5249	6478
Period 8	4078	5766	7345	4420	7340	6385	5440	7345	4960	7345	3675	11242	6526	6751	7345	7237	7340	3831	6383	6526
Period 9	6478	7345	4420	6526	6339	6115	6383	7340	7038	7345	6478	7345	5064	6526	3831	4950	5681	7340	6751	7345
Period 10	7237	5766	7340	6478	7340	6115	6383	3831	4950	6526	6478	6526	7237	7345	4488	6478	5766	6478	7779	7345
Period 11	6478	5766	6526	7340	7237	7345	3160	6526	7345	5681	7345	7345	6478	7345	7345	6339	7345	7340	2902	7345
Period 12	6478	6526	6526	5681	2886	7345	6383	7345	7345	3831	7345	19057	6339	7340	7340	7237	5064	6478	7038	5766
Period 13	7340	6526	7345	7345	6339	7345	5440	6526	6526	7345	7345	7345	7345	7340	7340	3675	7345	5681	7345	7345
Period 14	7340	7345	6526	6526	6339	7345	8561	7345	7345	7345	7345	3952	7345	5681	7340	7340	7345	7340	6526	6526
Period 15	7340	7345	5515	6526	5515	7345	6383	5766	6526	7345	4950	5766	6526	7340	7237	6115	7345	7340	7237	3831

3.6. Record Sheets and Questionnaires for the Tsukuba A Session

ID Number = 1, Male, Earnings = 2431 yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	11	Because my opponent would make a safe investment. I chose a middle number for a trail.	8	4381
Period 2	24	I tried to surprise my opponent.	9	500
Period 3	5	Because I expected that my opponent's investment number would be between 10 and 12, not more than 14.	7	3381
Period 4	8	Everyone will steadily invest around 7-9 units. So I chose 8 which would be most profitable among them.	9	5080

The Actual Experiment

Period 1	8	Because there is a strong likelihood that my opponent' investment number is between 7 and 9, I chose a similar number.	8	7345
Period 2	7	The same reason as at period 1.	4	4281
Period 3	8	Because my opponent would steadily invest around 7-9 units.	8	7345
Period 4	8	There are many periods to play. Everyone is steady.	5	5064
Period 5	6	I tried to make my opponent suffering a little loss. My opponent would invest at 7-9 units.	9	8209
Period 6	7	Both my opponent and I would receive reasonable payoffs by choosing this number.	7	6478
Period 7	8	My opponent's investment number would be between 5 and 7. This investment number 8 would be best for me.	8	7345
Period 8	6	I spited my opponent to reduce his payoff a bit.	4	4078
Period 9	7	By choosing 7, I can cope with any investment number of my opponent.	7	6478
Period 10	6	My opponent's payoff when I choose 6 is much smaller than that when I chose 8, while my payoff does not differ much. I spited him.	8	7237
Period 11	7	The same reasons as in period 10. My opponent would have the same idea.	7	6478
Period 12	7	By choosing 7, I would get a reasonable payoff and my opponent would not blame me.	7	6478
Period 13	7	The same as the above. A prisoner's dilemma situation. Everyone would have the same idea.	8	7340
Period 14	7	The same as the above.	8	7340
Period 15	7	The same as the above.	8	7340

ID Number = 1, Male, Earnings = 2431 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

The payoffs for investment numbers which would be hardly chosen are highest. My payoffs differ much if my opponent's investment numbers differ by 1, while they differ little if my investment numbers differ by 1.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (50) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Most of my opponents chose 6-8 safely. So I usually chose 6-8, too. However, I chose 6 or 7 many times, because I did not like that my opponent's payoff was higher than mine.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

Choose 6 if you want to get a larger payoff than your opponent's payoff. The difference of your payoff between choosing 6 and choosing 8 is relatively small, while the difference of your opponent's payoff is quite large. If it is desirable that both you and your opponent get large payoffs, choose 8 because your opponent almost always chooses 6-8.

ID Number = 2 Male Earnings = 2494 yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	7	My opponent would safely choose 12 at the first time. Choosing 7 is best for me when my opponent chooses 12.	8	4368
Period 2	10	Because I expected that everyone would invest around 7-12 units initially.	6	3520
Period 3	10	My opponent would decrease investment numbers. I chose 10 despite of a failure in period 2.	23	16993
Period 4	13	Already psychological warfare. Someone went on the gamble. My opponent would also realize the situation and choose an investment number carefully. I chose 13 to maximize my payoff when both I and my opponent choose the same number.	3	2340

The Actual Experiment

Period 1	8	My opponent would carefully choose a number at the first time. Both my opponent and I get reasonable payoffs if both chose 8.	8	7345
Period 2	8	The same reasons as above. My opponent changes, but he would have a similar idea.	6	5766
Period 3	8	At first glance, I might make a mistake at period 2. But choosing 8 would be best for me, regardless of which number my opponent chose.	7	6526
Period 4	8	My expectation at period 3 was correct. Choosing 8 is best for me if my opponent chooses a number between 6 and 8.	8	7345
Period 5	8	I am pretty sure now. I will continue to choose 8 as long as my opponent has the same idea.	7	6526
Period 6	8	Someone does not understand the situation. But he will eventually choose 8.	7	6526
Period 7	8	I am in trouble. Choosing 8 is absolutely better than choosing 7. I have nothing to write about the reasons. Everyone will end up choosing 8.	8	7345
Period 8	8	I will continue to choose 8 through period 15.	6	5766
Period 9	8	There is no meaning for reducing the payoff of the opponent. I would like to tell my opponent that he should focus on his own payoff. My payoff is higher when my opponent chooses 8 than when he chooses 6.	8	7345
Period 10	8	Sorry, I have nothing to write down.	6	5766
Period 11	8	I heave a sigh. Someone does not understand the situation.	6	5766
Period 12	8	I would like to ask my opponent why he chose 6.	7	6526
Period 13	8	I would like to ask my opponent why he chose 7.	7	6526
Period 14	8	Why? I wish my opponent chooses 24.	8	7345
Period 15	8	Thank you. I am glad to notice that everyone would end up choosing 8. If the rule of choosing 8 do not emerge, I would go on the gamble.	8	7345

ID Number = 2 Male Earnings = 2494 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

At practice periods, I took a look at Payoff Table 3 only. It helped me understand payoffs roughly. I used Payoff Table 2 to see how I can get a large payoff actually, when we had 10 minutes to look at the payoff tables before the actual experiment. Once the actual experiment began, I looked only at Payoff Table 1. For the chosen investment numbers were already limited and so detailed information on payoffs became important. However, it was difficult for me to decide investment numbers immediately without using Payoff Tables 2 and 3.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (27) % of expectations came true. 4 out of 15.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

At practice periods I found that one should decide his investment to maximize his own payoff, but not run a risk. I behaved on the presumption that everybody realized this fact. Some persons seemed not to realize it even at the actual experiment, although they chose numbers close to 8. Perhaps they might not look at the detailed payoff table, Table 1, when deciding investment numbers.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

At practice periods I was puzzled how much I should invest because I did not have enough time to consider. But I found investing 8 best because it was most profitable for any investment number of my opponent. Further, investing 8 have regularly been observed. Without this regularity, I might go on a gamble.

ID Number = 3 Female Earnings = 2381 yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	12	If I choose at least 18, my payoff is low, regardless of which number my opponent chooses. My opponent would have the same idea. Therefore I chose a middle investment number.	8	4213
Period 2	9	Because my payoff was much smaller than my opponent's at the previous period, I reduced my investment number.	13	7844
Period 3	7	I expected that my opponent's investment number would be between 10 and 15, and so I chose a small number again.	7	3790
Period 4	10	I expected that my opponent would choose a relatively small investment number, and so I chose a number larger than my number at the previous period.	20	13690

The Actual Experiment

Period 1	6	I expected that my opponent would invest at least 10 units.	8	7237
Period 2	3	I expected that my opponent would choose a larger investment number. I bravely chose a small investment number.	3	2575
Period 3	8	I expected that my opponent's investment number would be between 7 and 9.	7	6526
Period 4	5	I expected that my opponent would choose a relatively large investment number.	8	7038
Period 5	8	So far most opponents have invested 7 or 8 units. I expected such investment numbers from this trend.	8	7345
Period 6	8	I expected the same trend as in the previous period.	7	6526
Period 7	8	Because everyone seems to have the same idea, I have the same expectation as before.	8	7345
Period 8	8	The same as in the pervious period.	8	7345
Period 9	8	The same as in the previous period. Most people would have chosen 8.	4	4420
Period 10	7	I expected that my opponent would invest around 12 units.	8	7340
Period 11	8	I judged that it is safest to invest 8 units.	7	6526
Period 12	8	The same as the above.	7	6526
Period 13	8	The same as the above.	8	7345
Period 14	8	The same as the above.	7	6526
Period 15	6	I expected that my opponent might choose a little larger number at the final round.	6	5515

ID Number = 3 Female Earnings = 2381 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

First I looked at Table 3 to understand roughly how my payoff depends on my investment number and my opponent's. At each period I expected my opponent's investment number and considered how much I should invest under that expectation by looking at Table 2. Then I decided a number from Table 1.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Most people have learned of investment and trended to invest similar amounts as periods advanced. Once the trend established, it seemed to me that everybody became conservative and did not go on a gamble. I ventured to invest small units to get large payoffs. However, because I anticipated that my opponent would invest around 8, I also invested 8 at most periods. At period 15, I slightly changed my investment number because it was final, but my opponent had the exactly same idea. I had more fun at practice periods because my opponents invest various amounts.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

I think it is good to expect my opponent's investment calmly and make a steady investment. But such a investment is not interesting. But a risky investment might lead to a low payoff if my expectation proves wrong, and so it would not be economically efficient.

ID Number = 4 Female Earnings = 2436yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	8	My payoff is small if I choose a large or a small investment number. Therefore I expected that my opponent would choose a number between 8 and 16.	13	8018
Period 2	9	By Table 2, I thought that choosing 9 is most profitable.	7	3980
Period 3	6	There is a high possibility of my opponent's number being between 13 and 21.	8	4201
Period 4	9	I would receive most profitable payoff by choosing 9 if my opponent notice that it is efficient to choose a number between 7 and 9	9	5087

The Actual Experiment

Period 1	7	There is a high possibility of my payoff being at least 6000 if investment numbers are between 8 and 11. If my opponent chooses a number between 7 and 11, then the probability of getting a high payoff is best by choosing 7 or 8.	7	6478
Period 2	7	Choosing this number is efficient if my opponent chooses 7 or 8.	5	4950
Period 3	8	Choosing this number is efficient even if my opponent chooses a small number.	9	8225
Period 4	8	I expected that my opponent would choose a number around 7, and I chose the number inducing the largest payoff under that expectation.	8	7345
Period 5	8	I expected that my opponent would choose a number around 7. Choosing this number is efficient.	6	5766
Period 6	7	I expected that my opponent would choose a number around 9.	8	7340
Period 7	7	I expected that my opponent would choose a number around 9.	7	6478
Period 8	8	I expected that my opponent would choose a relatively small number (6-8).	4	4420
Period 9	8	I expected that my opponent would choose a number around 7.	7	6526
Period 10	7	I expected that my opponent would choose a number around 9.	7	6478
Period 11	7	I expected that my opponent would choose a number around 9 because small numbers have been continuously observed.	8	7340
Period 12	7	I expected that my opponent would choose a number around 9.	6	5681
Period 13	8	I expected that my opponent would choose a number around 6, because he attempted to make his opponent's payoff small.	8	7345
Period 14	8	Choosing this number assures a reasonable payoff even if my opponent chooses a small number.	7	6526
Period 15	8	I expected that my opponent would choose 7 or 8 to receive a reasonable payoff with a high probability.	7	6526

ID Number = 4 Female Earnings = 2436 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

At practice periods I mainly used Payoff Table 2. But it is so rough that I can only compare the average payoffs. In the actual experiment I used Payoff Table 1 to examine most profitable investment. Payoff Table 3 help me understand my opponent's state of mind.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (75) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

There was a cycle such that a large number came after a small number came, and so on. On average, middle numbers leading to constant payoffs have been observed. But I did not make investments based on the expectation of a cyclical investment pattern. Rather I chose my investment numbers applicable to several numbers of my opponent.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

First, decide your target payoff. Someone wants to reduce his opponent's payoff. Keep this in mind when choosing investment numbers. If your actual payoff is low than the target, choose a number which would result in a reasonable payoff safely. If your actual payoff is larger than the target, try a number which might result in a larger payoff.

ID Number = 5, Male, Earnings = 2439yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	11	I chose a safe number at the first time. My opponent also tried to see what happened.	6	3490
Period 2	24	Because I would like to spend all 24 units once.	12	500
Period 3	0	Because I might get a lot of money.	6	1416
Period 4	9	Because I expected that my opponent would choose a large number.	9	5087

The Actual Experiment

Period 1	7	Because I expected that my opponent would not choose a large number.	3	3675
Period 2	4	I tried to make a lot of money.	7	5812
Period 3	6	I chose a safe number	8	7237
Period 4	10	I would like to use a two-digit number once in a while.	8	7056
Period 5	6	Because my opponent would not choose a large number.	7	6339
Period 6	8	By intuition.	7	6526
Period 7	6	Choosing 6 would be best for me.	12	11589
Period 8	7	Choosing this number is safe.	8	7340
Period 9	6	From my success in period 7.	7	6339
Period 10	7	7 is a lucky number.	8	7340
Period 11	6	Because I want to avoid a risk.	8	7237
Period 12	18	Because I would like to make my opponent happy occasionally.	8	2886
Period 13	6	Because I made a mistake in the previous period.	7	6339
Period 14	6	Because choosing 6 is best for me.	7	6339
Period 15	6	Because I would like to choose 6 at the final round.	6	5515

ID Number = 5, Male, Earnings = 2439 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I most often referred to Payoff Table 3. Payoff Table 1 helped me examine detailed payoffs.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

My opponents almost always chose 7 or 8. It was not fun at all. I wished my opponents to invest 24 sometimes. Therefore I should inevitably chose 6 or 7 at most periods. I chose a different number, 18, only once, but the others solely chose 7 or 8.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

The best choice would be to make investments steadily, but not to run any risk. However, if everybody takes this choice, there is little difference in payoffs. If I continue to choose 6 or 7, I could have victories over my opponents to some degree.

ID Number =6, Male, Earnings = 2466yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	6	Nobody would choose an investment number between 13 and 24. I wish to secure at least 1000 payoff. I expected that my opponent would choose 12. Then choosing 6 or 7 leads to a high payoff.	11	6335
Period 2	3	I want to try several numbers in practice. I attempted to make my opponent's payoff small.	10	4769
Period 3	0	My opponent would not choose more than 13. I wish to make my opponent disappointed.	7	1815
Period 4	20	My opponent would choose 6, 7 or 11, 12. I tried to make my opponent happy once in a while.	10	1505

The Actual Experiment

Period 1	8	My opponent would choose 5,6,7 or 10,11,12. I chose a middle number.	8	7345
Period 2	5	My opponent would attempt to get payoffs safely.	7	6115
Period 3	9	I recognized I cannot receive a high payoff at once.	7	6481
Period 4	8	My opponent would choose 6, 7, or 8. Choosing this number would be best if he chose any of them.	8	7345
Period 5	8	My opponent would also choose 8. Choosing this number would be best if he did so.	3	3831
Period 6	12	I would like to provoke my opponent, although I know my payoff might decrease.	8	6385
Period 7	12	The same as the above.	7	5800
Period 8	12	The same as the above.	8	6385
Period 9	5	My opponent would choose 7 or 8. I shake my opponent, as long as I can avoid a big loss.	7	6115
Period 10	5	The same as the above.	7	6115
Period 11	8	I recognize that provoking my opponent does not make a sense, and I choose a safe number.	8	7345
Period 12	8	The same as the above.	8	7345
Period 13	8	The same as the above.	8	7345
Period 14	8	The same as the above.	8	7345
Period 15	8	The same as the above.	8	7345

ID Number =6, Male, Earnings = 2466 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

Payoff Table 3 is little meaningful.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Because it was tedious to make safe investments, I behaved more aggressively, but I failed.
I think my opponents would try not to suffer a loss, rather than to get a large payoff, because this two-person investment game is just an experiment.
The situation would change if the payment is much higher and the payoff is different so that we might suffer a big loss for some investment.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

Try to realize the character of the opponent (it may not be possible because the number of periods is limited).
1) At early periods, choose 18-20 to induce the opponent to do the same thing and consider the progress of a battle.
2) Choose 8 at all periods.
3) Choose 20 at all periods and collect the loss after the experiment (this will not go well if there is somebody else who also scarifies his own payoff).

ID Number = 7, Male, Earnings = 2286yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	13	I expected that my opponent would invest 13 units.	8	3981
Period 2	9	I expected that my opponent would choose an investment number between 1 and 10.	7	3980
Period 3	7	I expected that my opponent would choose 8 or 9.	5	2792
Period 4	3	I expected that my opponent would choose a small investment number.	13	7447

The Actual Experiment

Period 1	3	Based on my experiences in practice, I thought I could make a profit by choosing a number which is smaller than my opponent's number. I expected that my opponent would not choose a large number.	7	5440
Period 2	3	The same as the above.	3	2575
Period 3	3	The same as the above.	7	5440
Period 4	3	The same as the above.	7	5440
Period 5	3	The same as the above.	8	6383
Period 6	3	The same as the above.	13	12589
Period 7	3	The same as the above.	7	5440
Period 8	3	The same as the above.	7	5440
Period 9	3	The same as the above.	8	6383
Period 10	3	The same as the above.	8	6383
Period 11	3	The same as the above.	4	3160
Period 12	3	The same as the above.	8	6383
Period 13	3	The same as the above.	7	5440
Period 14	3	The same as the above.	10	8561
Period 15	3	The same as the above.	8	6383

ID Number = 7, Male, Earnings = 2286 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to Payoff Table 1 only. Tables 2 and 3 were little helpful. I think the possibility of failure would become larger if I refer to them.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

2. If my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Investing 7 or 8 were frequently observed. This would be because both could get reasonable payoffs safely. Because I always wanted to get a larger payoff than my opponent's, I always chose 3 in an attempt to enlarge the difference between my payoff and my opponent's by choosing a small number.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

I think the best situation is that both of us get large payoffs. But it did not go well because people had different opinions. At a practice period I invested 13 and expected my opponent to invest a similar amount, but I was betrayed. So I decided to reduce my opponent's payoff. Off course, the experimenters do not welcome this. At every period of the actual experiment, I received a larger payoff than my opponent's. But I do think my earnings is much larger than others'. I want to get more money than others get. I am satisfied with my strategy in this experiment.

ID Number = 8, Female, Earnings = 2438yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	8	Because I expected that my opponent would write a middle number at the first time.	12	7206
Period 2	10	Because I expected to receive a reasonable payoff.	6	3520
Period 3	7	Because I expected that my opponent would not write a large number.	0	1148
Period 4	10	Because I expected to receive a reasonable payoff, although my opponent's payoff might be low.	9	5019

The Actual Experiment

Period 1	7	Because I expected that my payoff would not be bad by looking at the tables.	7	6478
Period 2	6	Because I expected that my opponent would not choose a large investment number.	8	7237
Period 3	8	Because I expected that my opponent would choose a similar investment number.	8	7345
Period 4	8	Because my opponents have chosen a number around 8.	7	6526
Period 5	7	Because I still expected that my opponent would choose a number between 6 and 8.	6	5681
Period 6	7	Because I expected to receive a reasonable payoff.	7	6478
Period 7	8	Choosing 6 and 7 have continued. I expected 6 or 7 again.	6	5766
Period 8	8	Because I expected that my opponent would choose a similar number.	8	7345
Period 9	7	Because I expected to receive a reasonable payoff.	8	7340
Period 10	8	Choosing 8 have continued these few periods. I expected to receive a reasonable payoff by choosing 8.	3	3831
Period 11	8	Because I expected to receive a reasonable payoff.	7	6526
Period 12	8	Because I expected that my opponent would choose a similar investment number.	8	7345
Period 13	8	Because so far I have received a reasonable payoff by choosing 8.	7	6526
Period 14	8	Because I expected to receive a reasonable payoff.	8	7345
Period 15	8	Because I thought I could get the best payoff by choosing 8 after all.	6	5766

ID Number = 8, Female, Earnings = 2438 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

First I used Payoff Table 3 to understand payoff structure roughly. Then, I looked at Payoff Table 2 to decide investment numbers at practice periods and periods 1-3 of the actual experiment. I used Payoff Table 1 at both practice and the actual experiment.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

My investment numbers were similar to my opponents' at most periods. I chose an investment number in an attempt to get the largest payoff under the expectation that my opponent would choose a similar number.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

Off course I am happy if I receive a large payoff. But I realized from Payoff Table 1 that I would not get a large payoff if I consider my payoff only. If I decide an investment number so that my opponent would receive a reasonable payoff by investing this number, then I would also receive a reasonable payoff. The best choice would be to make an investment decision so that both my own payoff and my opponent's are reasonably high. It is not to choose an investment number to entrap my opponent.

ID Number = 9, Male, Earnings = 2303 yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	8	By intuition.	7	3915
Period 2	5	I expected that my opponent would choose a number between 13 and 21, and I chose a number maximizing my payoff.	13	7956
Period 3	6	I expected that my opponent would choose a number between 19 and 24. If this expectation was true, I could get the highest payoff by choosing a number between 0 and 3. But this is rather risky and so I chose a larger number.	0	1007
Period 4	8	Because I expected that my opponent would choose a middle number, I chose a safe number.	9	5080

The Actual Experiment

Period 1	8	I expected that my opponent would choose a number between 0 and 9. Choosing 8 ensures a mean payoff.	6	5766
Period 2	5	I expected that my opponent would choose a number between 10 and 15. By choosing 5, I would get the highest payoff.	8	7038
Period 3	0	I expected that my opponent would choose a number between 19 and 24. I chose 0, although I knew it is risky.	7	4018
Period 4	5	By choosing this number, I would receive good payoffs on average.	7	6115
Period 5	6	I expected that my opponent would choose a number between 10 and 18.	8	7237
Period 6	13	I was bored by choosing a number between 5 and 8.	3	3626
Period 7	5	I expected that my opponent would choose a number between 5 and 8. Choosing this number would guarantee a mean payoff.	8	7038
Period 8	4	I expected that my opponent would choose a large number between 10 and 24.	6	4960
Period 9	5	I expected that my opponent would choose a number between 5 and 8. Choosing this number would guarantee a mean payoff.	8	7038
Period 10	7	Because I expected that my opponent would choose a number between 6 and 8.	5	4950
Period 11	8	Because I expected that my opponent would choose 8.	8	7345
Period 12	8	Because I expected that my opponent would choose a number between 4 and 9.	8	7345
Period 13	8	The same as the above.	7	6526
Period 14	8	The same as the above.	8	7345
Period 15	8	The same as the above.	7	6526

ID Number = 9, Male, Earnings = 2303 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 2 to decide my investment number. My payoff is not large when I choose a large investment number. This is different from the usual risky investment. Further, even when I choose a small investment number, my payoff is low unless my opponent's investment number is large. I realized that I cannot expect to receive a large payoff.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (50) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Everybody have steadily invested 5-8 from the begging of the experiment. Therefore I have continuously invested 8, which is most profitable for such investment numbers.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

I was mortified when my opponent's payoff was higher than mime. However, when I attempted to make my opponent's payoff low, my payoff was often low, too. I believed I selected the best method to maximize my payoff.

ID Number = 10, Male, Earnings = 2707yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	8	The payoff depends on my opponent's investment number, no matter whether I choose a small number or a large number. Therefore everyone would choose a safe number.	10	5737
Period 2	8	I did not expect my opponent would choose a large number.	10	5737
Period 3	8	Many people have written 10. I would receive the highest payoff by choosing 8 if my opponent chose 10.	6	3405
Period 4	8	Is there anybody who tries to change such stereotyped behavior?	7	3915

The Actual Experiment

Period 1	8	Everyone wants a high payoff. We would surely receive reasonable payoffs if each of us tried to make both payoffs high, rather than to establish a lead on his opponent's for payoffs.	8	7345
Period 2	8	My opponent would also prefer mean luck of both to bad luck of the other.	10	9168
Period 3	8	At the previous period, my opponent got a higher payoff than I did. But if I also reduced an investment number, then my payoff would decrease further.	8	7345
Period 4	8	Someone seems to have a similar idea.	7	6526
Period 5	8	At the previous period the investment number of my opponent was accidentally low.	8	7345
Period 6	8	This is it.	12	11242
Period 7	8	Someone might want to change such stereotyped behavior. But I will not do it.	7	6526
Period 8	8	There were a little movement, but it would not prevail.	8	7345
Period 9	8	I return to my original intention.	8	7345
Period 10	8	Everyone has constantly chosen 8.	7	6526
Period 11	7	I feel that something might happen next time. Actually, the difference of my payoff between (8, 8) and (7, 8) is only 5.	6	5681
Period 12	8	Small investment numbers have increased. But my payoff would decrease if I also chose a small number.	3	3831
Period 13	8	My opponent at the previous period tried to entice me, but it did not work.	8	7345
Period 14	8	Stop useless struggling.	8	7345
Period 15	8	Coexistence or exclusion.	8	7345

ID Number = 10, Male, Earnings = 2707 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (2) in Practice

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I realized that my payoff is low both when I invest small units and when I invest large units. For a small investment number, my payoff might be large only when my opponent chooses a large investment number. But this would hardly happen. So I have patiently chosen investment numbers so that both my payoff and my opponents' payoffs were reasonably high.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (70) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

I invested the same amount at all periods except one. By contrast, my opponents sometimes changed investment numbers (although my opponent changed at each period). Investment numbers have been stable around 8, but they became unstable at the last few periods. At these periods, my opponents decreased investment numbers, because they might have in mind that they spited their opponents and they won victories over them.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

If I try to receive a larger payoff than my opponent's, the absolute value of my payoff would be small, although it would be relatively larger. What is beneficial to me is not to win a game over my opponent, but to receive a lot of money. The good choice would be to make an investment decision so that both I and my opponent would receive a lot of money.

ID Number = 11, Male, Earnings = 2387yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	7	I expected that my opponent would choose the average number 12. I chose 7 to get the largest payoff when he chose 12.	11	6432
Period 2	10	I expected that my opponent would choose a number between 15 and 19. I chose 10 to get a reasonable payoff under that expectation.	8	4481
Period 3	7	My opponents have gradually decreased investment numbers. Therefore I chose 7 to get the largest payoff if my opponent chose a number between 7 and 9.	7	3790
Period 4	10	Choosing a small number around 7 was observed. I chose 10 to get the largest payoff if my opponent chose such a number.	8	4481

The Actual Experiment

Period 1	7	From a few of results in practice, I expected that my opponent would choose a number between 7 and 9. I chose 7 to get the largest payoff under that expectation.	8	7340
Period 2	7	From data at the previous four periods, I expected that my opponent would choose a number between 7 and 9. I chose 7 to get a large payoff under that expectation.	8	7340
Period 3	7	Because numbers between 7 and 9 have been continuously observed, I chose 7 again.	0	2210
Period 4	7	I still expected that my opponent would choose a number between 7 and 9, although someone chose 0 at the previous period. I chose 7 again.	7	6478
Period 5	7	At seven periods except period 3, my opponents chose 7 or 8. I chose this number to get a large payoff when my opponent chose the mean value.	8	7340
Period 6	7	Because numbers 7 and 9 have been continuously observed, I has the same expectation.	8	7340
Period 7	7	I chose this number to get the largest payoff if my opponent chose a middle number between 6 and 12.	7	6478
Period 8	7	At all periods except practice period 1 and period 3 of the actual experiment, my opponents chose 7 or 8. I expected the same situation.	3	3675
Period 9	7	I thought the investment number at the previous period was an exception. I expected a number between 7 and 9 again.	7	6478
Period 10	7	I continue to choose 7 from period 1 to see what happens.	7	6478
Period 11	8	From period 1 to period 10 of the actual experiment, numbers equal to or larger than 10 have never been observed and 7 and 8 have been observed at most periods. I chose 8 to receive a large payoff for these numbers.	8	7345
Period 12	8	I chose 8 to receive a high payoff when my opponent's investment numbers were between 4 and 10.	8	7345
Period 13	8	Because choosing 8 would prevail, I also chose 8 to maximize my payoff.	8	7345
Period 14	8	I expected that my opponent would also choose around 8 at this period, based on the experience at the pervious three periods.	8	7345
Period 15	7	Perhaps my opponent would choose 8, but he might choose an extreme number because this is the final period.	5	4950

ID Number = 11, Male, Earnings = 2387 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

If both I and my opponent choose the same number, choosing 12 maximizes our payoffs. Therefore I thought everybody would choose this number. However, choosing 7-8 prevailed. Consequently I chose 7 or 8. My payoff is largest when my opponent chooses 24 and I choose 0, but there would be no such a dupe.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (85) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Because investment numbers became stable at 7-8 at practice periods, I expected investment numbers to become stable around such numbers in the actual experiment, and the expectation almost always came true. But at two periods I faced the opponents who chose an extremely small number and so both received low payoffs. Overall, most of my expectations came true and I could receive the highest possible payoffs.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

Both I and my opponent would receive reasonably high payoffs if both choose 10-12. However there are some persons who tried to make his own payoff high. So the good choice would be to invest 7-9, slightly lower than 10-12.

ID Number = 12, Male, Earnings = 2938yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	9	I expected that my opponent would choose at least 10.	2	1945
Period 2	13	Because I expected that my opponent would choose a small number.	5	2925
Period 3	23	Because this is practice.	10	573
Period 4	24	The same as the above.	5	500

The Actual Experiment

Period 1	8	I expected that my opponent would choose 8, and so I chose 8 to receive the highest payoff if he did so.	8	7345
Period 2	8	The same as the above.	7	6526
Period 3	8	The same as the above.	8	7345
Period 4	8	The same as the above.	8	7345
Period 5	8	I expected that my opponent would absolutely choose 8. I chose 8 to receive the largest payoff 7345 under that expectation.	7	6526
Period 6	8	The same as the above.	7	6526
Period 7	8	The same as the above.	8	7345
Period 8	8	The same as the above.	12	11242
Period 9	8	The same as the above.	8	7345
Period 10	8	The same as the above.	7	6526
Period 11	8	The same as the above.	8	7345
Period 12	8	The same as the above.	18	19057
Period 13	8	By choosing 8, I can get a reasonable payoff for any investment number of my opponent.	8	7345
Period 14	10	I betted that my opponent would choose 13.	3	3952
Period 15	8	Choosing 8 is almighty.	6	5766

ID Number = 12, Male, Earnings = 2938 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

Payoff Table 3 is useless. I initially used Table 2 a little, but I referred to Table 1 to decide my investment numbers because Table 1 gives more accurate payoff values. I thought that by investing 8, I could get a good payoff for any investment number of my opponent.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (50) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Most of my opponents invested 8. I also invested 8, because I found from Payoff Table 1 that my payoff is maximized by investing 8 when my opponent invests 8.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

I think the best choice is to invest 8. The reason is described in (7).

ID Number = 13, Male, Earnings = 2513yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	11	Because I could receive a reasonable payoff by choosing this number.	7	3918
Period 2	6	Because I expected that my opponent's investment number would be larger than mine.	10	5561
Period 3	8	Because I expected that my opponent's investment number would be larger than mine.	9	5080
Period 4	5	Because I expected that my opponent's investment number would be close to the average number.	8	3976

The Actual Experiment

Period 1	9	Because I expected that my opponent's investment number would be similar to mine.	8	7250
Period 2	8	Because I expected that my opponent's investment number would be similar to that at the previous period.	9	8225
Period 3	7	The same as the above.	3	3675
Period 4	8	Because I expected that my opponent's investment number would be similar to mine.	8	7345
Period 5	8	Because I expected that my opponent's investment number would be similar to that at period 4.	8	7345
Period 6	7	Because I expected that my opponent's investment number would be close to 8.	8	7340
Period 7	7	Because I expected that my opponent's investment number would be similar to that at period 6.	7	6478
Period 8	8	Because I expected that my opponent's investment number would increase.	7	6526
Period 9	8	Because I expected that my opponent's investment number would be 7 or 8.	5	5064
Period 10	6	Because I expected that my opponent's investment number would be small.	8	7237
Period 11	7	Because I expected that my opponent's investment number would be close to 8.	7	6478
Period 12	6	Because I expected that my opponent's investment number would be close to 8.	7	6339
Period 13	8	I expected that my opponent's investment number would be 7 or 8.	8	7345
Period 14	8	The same as the above.	8	7345
Period 15	8	The same as the above.	7	6526

ID Number = 13, Male, Earnings = 2513 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (3) in Practice

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I understood payoffs roughly by using Table 2, and I decided my investment numbers by using Payoff Table 1.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (60) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Most of my opponents' investment numbers were 7 or 8, but some of them were less than 7.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

I think it is good to invest similar units, but not to change investment numbers extremely.

ID Number = 14, Male, Earnings = 2639yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	8	I expected that my opponent would choose a clear-cut number, "10", at the first time. I chose the number maximizing my payoff when he chose 10.	7	3915
Period 2	7	I tried the number which is smaller than that at previous period by 1.	9	5000
Period 3	9	I expected that my opponent's number would be 8 or 9 from the experience at the previous two periods. This number maximizes my payoff when he chooses 8 or 9.	6	3491
Period 4	9	The average value of opponents' numbers over the past three periods is 7.33. Choosing 9 maximizes my payoff when my opponent chooses 7 or 8.	8	4512

The Actual Experiment

Period 1	8	If both my opponent and I choose 8, I maximize my own payoff for the number chosen by my opponent, and so does my opponent.	6	5766
Period 2	8	The same as the above.	8	7345
Period 3	7	I changed the investment number a little, because there is little difference between choosing 7 and choosing 8.	9	8271
Period 4	7	I expected that my opponent' number would be between 8 and 10.	7	6478
Period 5	8	I lost my payoff at the previous period.	8	7345
Period 6	7	I hoped my opponent's number would be large.	8	7340
Period 7	7	Choosing 7 maximizes my payoff if my opponent chooses 8 or 9. I thought my opponent would choose 9 this time.	8	7340
Period 8	4	I attempted to spite my opponent once. But, by choosing 3, I would also lose my payoff a lot. (The difference of my payoff between choosing 4 and choosing 5 is much smaller than that between choosing 3 and choosing 4.)	8	6751
Period 9	8	I recognized that choosing 8 was best after all. Because I lost my payoff at the previous period, I wished to maximize my payoff at this period.	7	6526
Period 10	8	I recognized that choosing 8 was best after all. Because I lost my payoff at period 8, I wished to maximize my payoff at this period.	8	7345
Period 11	8	I recognized that choosing 8 was best after all. Because I lost my payoff at period 8, I wished to maximize my payoff at this period.	8	7345
Period 12	7	When my opponent chooses 8, the difference of my payoff between choosing 7 and choosing 8 is only 5. I just tried this number.	8	7340
Period 13	7	The same as the above.	8	7340
Period 14	7	The same as the above.	6	5681
Period 15	7	The same as the above.	8	7340

ID Number = 14, Male, Earnings = 2639 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

Table 2 is little useful. Tables 1 and 3 give detailed information on payoffs. First I referred to Table 3. But as periods advanced, I got used to more detailed Table 1 and then looked only at Table 1.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

6. Others (please specify).

First, "3" (it is desirable that both my payoff and my opponent's payoff are as high as possible). But I thought that it would be hardly achieved because no communication was allowed. Later, almost always "1" (it is desirable that my payoff is high, regardless of my opponent's payoff) and sometime "2" (if my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small).

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (60) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

My opponents tended to reduce their opponent's payoff although their own payoff was slightly smaller than the maximum. First, I simply tried to maximize my own payoff. Later, in rivalry with my opponents, I also attempted to reduce their payoffs although my payoff decreased.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

I should consult with my opponent if possible. If not, I should try to maximize my own payoff, regardless of my opponent's payoff. This is because there are many people to play and so there is little overall effect even if I reduce my opponent's payoff. Further, making my opponent's payoff small does not lead to my benefit.

ID Number = 15, Male, Earnings = 2493yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	8	By choosing this number, I could receive a reasonable payoff, no matter whether my opponent chooses a large investment number or a small investment number.	11	6446
Period 2	10	I expected that my opponent's investment number would be smaller than that at the previous period.	3	2356
Period 3	5	I expected that my opponent would choose a large number.	0	870
Period 4	8	The same as period 1.	5	2942

The Actual Experiment

Period 1	6	I expected that my opponent would choose at least 11.	9	8209
Period 2	8	I expected that my opponent would choose a number between 6 and 8.	8	7345
Period 3	8	I chose a safe investment number. The same as the above.	6	5766
Period 4	7	I expected that my opponent would choose 9 or 10.	8	7340
Period 5	7	I expected that my opponent would choose 9 or 10.	7	6478
Period 6	6	I expected that my opponent would choose at least 11.	8	7237
Period 7	8	I expected that my opponent would choose a number between 6 and 8.	5	5064
Period 8	8	The same as the above.	8	7345
Period 9	8	The same as the above.	3	3831
Period 10	9	I expected that my opponent would choose 4 or 5.	4	4488
Period 11	8	I expected that my opponent would choose a number between 6 and 8.	8	7345
Period 12	7	I expected that my opponent would choose 9 or 10.	8	7340
Period 13	7	The same as the above.	8	7340
Period 14	7	The same as the above.	8	7340
Period 15	6	I expected that my opponent would choose at least 11.	8	7237

ID Number = 15, Male, Earnings = 2493 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

First I looked at Table 3. Then I used Table 1 to decide my investment number, by checking my investment number maximizing my payoff for each investment number of my opponent.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (60) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

At early periods my opponents' investment numbers scattered, but at later periods they converged to 8. I thought I should also choose the safe number 8 constantly, but I chose slightly different numbers 6 and 7 at some periods.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

The best choice would be to invest 8 constantly. For investing 8 maximizes my payoff if my opponent invests 6-8, and it would not cause a big loss even if my opponent chooses a different investment number. Moreover, my opponent would have the same idea, and so both I and my opponent would choose 8.

ID Number = 16, Male, Earnings = 2462yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	7	Because I expected that my opponent would choose a middle investment number (around 12) at the first time.	8	4368
Period 2	12	Because I expected that my opponent would choose a small investment number in an attempt to receive a large payoff.	24	15236
Period 3	12	The same as the above.	4	2700
Period 4	5	Because I expected that my opponent might choose a large investment number for safety.	24	23315

The Actual Experiment

Period 1	9	I expected that my opponent would choose a small investment number in an attempt to receive a large payoff at early periods, and I chose a safe number.	6	5765
Period 2	9	The same as the above.	8	7250
Period 3	9	The same as the above.	8	7250
Period 4	7	The same as the above.	5	4950
Period 5	9	I expected that my opponent would choose a small investment number in an attempt to receive a large payoff at early periods.	6	5765
Period 6	9	I still expected that my opponent would choose a small investment number in an attempt to receive a large payoff. This trend seems to continue.	12	10877
Period 7	6	My opponent would choose a middle investment number in an attempt to receive a reasonable payoff safely. Such a trend emerged.	8	7237
Period 8	6	The same as the above.	8	7237
Period 9	7	The same as the above.	5	4950
Period 10	7	The same as the above.	7	6478
Period 11	6	Because I expected that my opponent would safely choose a middle investment number.	7	6339
Period 12	6	The same as the above.	8	7237
Period 13	7	The same as the above.	3	3675
Period 14	7	The same as the above.	8	7340
Period 15	5	The same as the above.	7	6115

ID Number = 16, Male, Earnings = 2462 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I mainly used Tables 1 and 2 among the three tables. I understood the trend roughly from Table 2. In Table 1, I put a mark on the investment number maximizing my payoff for each investment number of my opponent.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (65) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Some people tried to get a large payoff by investing a small amount. But most people made steady investment decisions. I attempted to make my payoff as large as possible, considering their behavior. However, I always cared about my opponent's payoff, and I was mortified when my opponent's payoff was larger than mine. Nevertheless, I simply accepted the situation, because I could not decide my opponent's number and only thing I could do was to choose the number to maximize my payoff even when my opponent wrote a small number.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

My opponent would make a steady investment decision because he must know that investing a large amount, say 24, is not profitable. Therefore, the best choice would be to invest 6-9. In fact, I did so because I realized from the payoff tables that I could not get a large payoff anyhow.

ID Number = 17, Male, Earnings = 2500yen

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	7	I expected that my opponent would choose a middle number between 10 and 12 at the first time. With this expectation, I chose 7 among the numbers leading large payoffs, 7-9.	11	6432
Period 2	7	I still expected that my opponent would choose a middle number.	9	5000
Period 3	4	I did a risky attempt. My opponent might choose at least 13.	12	6785
Period 4	8	Because my opponents seems to like a middle number.	10	5737

The Actual Experiment

Period 1	6	My opponent will certainly choose a number between 10 and 12 at the first period of the actual experiment.	8	7237
Period 2	7	My opponent would choose a number less than or equal to 10.	8	7340
Period 3	7	My opponent would choose a number less than or equal to 10. Perhaps 8.	8	7340
Period 4	7	My opponent will certainly choose 8.	8	7340
Period 5	7	My opponent will surely choose 8.	7	6478
Period 6	7	I still expected that my opponent chooses 8.	8	7340
Period 7	7	The same as the above.	3	3675
Period 8	7	The choice of my opponent in the previous period was unusual. After all, 8.	8	7340
Period 9	7	I considered 8 only.	6	5681
Period 10	8	My opponent would choose 8. I chose a different number 8 because my opponent would not choose 9 or more.	6	5766
Period 11	8	The same as the above.	8	7345
Period 12	8	It seems that choosing 8 prevails.	5	5064
Period 13	8	Choosing 8 maximizes my profit even if my opponent chooses a number between 4 and 7.	8	7345
Period 14	8	The same as the above.	8	7345
Period 15	8	The same as the above.	8	7345

ID Number = 17, Male, Earnings = 2500 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (1) in Practice

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to Table 2 mainly.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

There were some silly persons who invested 3-6. I ignored them. In the early stage, my opponents chose 10-12 steadily, but their investment numbers have gradually converged to 8. I expected them and so I received large payoffs overall. In the later stage, some persons invested small units. I did not get it. We just lose each other.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

The best choice is to invest 8, because my opponent will choose 8 only.

ID Number = 18, Male, Earnings = 2574yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	2	By choosing this number, my opponent would not receive a good payoff, no matter whether his investment number is low or high.	9	3675
Period 2	13	I expected that my opponent would choose a large number at period 2.	9	4383
Period 3	0	By choosing this number, I would get a reasonable payoff, independent of my opponent' number.	5	1097
Period 4	7	I expected that my opponent would choose 12. Choosing this number maximizes my payoff if he chooses 12.	8	4368

The Actual Experiment

Period 1	8	I expected that my opponent's investment number would be 7 or 8. Choosing 8 makes my payoff high under that expectation.	9	8225
Period 2	8	The same as the above.	7	6526
Period 3	7	I expected that my opponent might unreasonably choose 9 or 10 at period 3.	8	7340
Period 4	7	My expectation at the previous period proved wrong. But I still believed my opponent would choose 9 or 10 at this period.	3	3675
Period 5	8	Because I expected that my opponent would choose 7 or 8.	8	7345
Period 6	8	After finishing five periods, I expected the probability that my opponent chooses 7 or 8 was high.	7	6526
Period 7	7	I expected that my opponent would choose 9 or 10 this time.	12	11480
Period 8	8	I expected that my opponent would choose 7 or 8 with high probability.	3	3831
Period 9	7	I expected that my opponent might choose 9 or 10 unreasonably.	8	7340
Period 10	7	I expected that my opponent might choose 9 or 10 this time, although my expectation at the previous period proved wrong.	7	6478
Period 11	7	So far, choosing a number less than 7 has hardly been observed, while choosing 7 and 8 have frequently been observed. I expected a number larger or equal to 7.	8	7340
Period 12	7	Because my expectation at the last period was right, I expected that my opponent would choose a number larger than or equal to 7.	7	6478
Period 13	7	I was confident that my opponent would choose a number larger than or equal to 7, because my expectations on the last four periods were right.	6	5681
Period 14	7	Because I was still confident that my opponent would choose a number larger than or equal to 7, although my expectation at the last period proved wrong.	8	7340
Period 15	7	Because I was confident that my opponent would choose a number larger than or equal to 7, because of my previous successes of choosing 7.	8	7340

ID Number = 18, Male, Earnings = 2574 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I used Tables 1 and 3 to analyze payoffs. For Table 2, I thought that the number of payoff values taken for one average value is too many.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Most of my opponent chose at least 7 (most often, 7 or 8). I considered which number leads to a high payoff when my opponent chooses 7 or 8, and I also decided to choose 7 or 8.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

It is important to expect which numbers most people would choose and consider which investment number among those numbers is most beneficial to me. I think investment with low risk and low return would be best. Because it could happen that for investment with high risk, my payoff may be relatively low, while my opponent may be relatively large.

ID Number = 19, Male, Earnings = 2495yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	11	I expected that the upper limit of my opponent's investment number would be 15 and the lower limit be 0. I chose this number to get a reasonable payoff under that expectation.	7	3918
Period 2	6	By choosing this number, I would get a high payoff if my opponent's investment number is 0 and 15.	10	5561
Period 3	6	The same as the above.	9	4850
Period 4	9	I had been concerned only with my payoff, but not my opponent's. By choosing this number, my opponent would also receive a high payoff.	8	4512

The Actual Experiment

Period 1	8	I expected that my opponent's number would be between 6 and 8 because my opponent would not choose a number beneficial to me. I chose 8 to maximize my payoff under this expectation.	8	7345
Period 2	10	I expected that my opponent's number would be between 8 and 10, because my opponent would care about his own payoff as well as my payoff and he would ensure around 7000 payoff by choosing such a number. I chose this number to maximize my payoff under this expectation.	8	7056
Period 3	9	My opponent would choose a number such that both he and I can get reasonable payoffs.	7	6481
Period 4	8	The same as in period 1. I would get a high payoff if my opponent chose a larger number.	8	7345
Period 5	8	Initially I planed to do a risky attempt to confuse the market, but I chose a safe number after all.	8	7345
Period 6	12	I expected that my opponent would choose 8. Because I am happy that my payoff is around 6000, I attempted to activate the market.	9	7007
Period 7	12	The same as the above.	6	5249
Period 8	3	I want to increase my payoff, but it is better to choose a small number to confuse the market.	8	6383
Period 9	4	I tried to confuse the market again, but I also want to receive a higher payoff. Hopefully my opponent would choose at least 8.	8	6751
Period 10	4	The same the above. I should use this strategy from an earlier period. I want to make my opponent suffering a loss for the time being.	9	7779
Period 11	4	The same as the above.	3	2902
Period 12	5	I would like to receive a reasonable payoff safely. My opponent would not choose a large number.	8	7038
Period 13	8	It is meaningless to make my opponent suffering a loss at these later periods. I have contended with the persons who have received high payoffs with large investment numbers. But I cannot predict their behavior.	8	7345
Period 14	8	I should choose 8 when my opponent chooses the average number 8.	7	6526
Period 15	6	I looked for a possibility of getting a high payoff, and wanted to keep my payoff at least 7000 level.	8	7237

ID Number = 19, Male, Earnings = 2495 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

I almost always used Table 1 and I referred to 2 and 3 little. But I sometimes lay Table 3 upon Table 1 when I looked at Table 1.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

6. Others (please specify). $5 \rightarrow 3 \rightarrow 4 \rightarrow 1$.

(5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff. $\rightarrow$ 2. If my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small. $\rightarrow$ 3. It is desirable that both my payoff and my opponent's payoff are as high as possible. $\rightarrow$ 4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.)

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (50) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

Everybody understood well that he gets the highest payoff when his opponent chooses 6-8, and he behaved based on it. But I always considered that my earnings is 3000 yen when my average payoff is 8000, and that even when my payoff decreases by 30 points, my actual earnings decreases only by 30×0.25 yen and it is not a big deal. So I changed my strategy to make my opponent's payoff low and get the level of 7,000 points. However, I was very disappointed when I invested 4 and my opponent invested 3. The largest investment number of my opponent is 9. After all, none would take behavior for mutual benefit. In the later stage, I chose small numbers with the hope that somebody might take such behavior.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

It is good to invest a large amount, say 15 or 20, boldly at practice. Or it is also good to choose 12 at all practice periods. This might lead to emergence of persons who considers mutual benefit in the later stage of the actual experiment. Then choosing 6 or 8 would result in a large payoff. At the first few rounds of the actual experiment, choose 10 in an attempt to receive the level of 7000 points. After that, choose 6-8 basically, but sometime 3 or 4. Is it good? Or is it good to choose 6-8 continuously?

ID Number = 20, Female, Earnings = 2523yen.

Practice

	Your Invest-ment Number	The Reasons for Your Decision on Your Investment Number (Please specify your expectation on your opponent's investment number and the reasons why you chose your investment number.)	Your Opponent's Investment Number	Your Payoff
Period 1	10	Because I expected that my opponent would choose an investment number between 10 and 12.	8	4481
Period 2	9	I expected that my opponent would choose an investment number between 7 and 9.	24	19506
Period 3	9	By choosing this number, I can guarantee a reasonable payoff, regardless of my opponent's investment number. Thinking a similar way, my opponent would also choose an investment number between 7 and 9.	8	4512
Period 4	9	My opponent would not choose a larger number and take a safe strategy.	10	5707

The Actual Experiment

Period 1	8	I expected that my opponent would also choose an investment number between 7 and 9. None would choose a large number (19-24) nor a small number (0-3).	7	6526
Period 2	8	I expected that my opponent would choose an investment number between 7 and 10.	5	5064
Period 3	7	By choosing this number, I can receive a reasonable payoff even when my opponent chooses a small number.	9	8271
Period 4	8	I expected that my opponent would choose an investment number around 7.	10	9168
Period 5	7	The same as the above.	8	7340
Period 6	8	I expected that my opponent's investment number would almost be 7 or 8.	6	5766
Period 7	7	I expected that my opponent's investment number would be 7 or 8. I chose a similar number.	7	6478
Period 8	8	I expected that my opponent's investment number would be 7 or 8.	7	6526
Period 9	8	The same as the above.	8	7345
Period 10	8	The same as the above.	8	7345
Period 11	8	The same as the above.	8	7345
Period 12	8	The same as the above.	6	5766
Period 13	8	I expected that my opponent's investment number would be 7 or 8. By choosing this number, I can receive a reasonable payoff even when my opponent chooses a smaller number.	8	7345
Period 14	8	I expected that my opponent's investment number would be 7 or 8.	7	6526
Period 15	8	The same as the above.	3	3831

ID Number = 20, Female, Earnings = 2523 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three payoff tables? Which tables did you take a look at when you decided your investment number?

First, by Payoff Table 2, I got a rough idea of which number would be best. Then, by Payoff Table 1, I carefully compared payoff values and decided my investment number.

(4) This question is to ask your investment behavior. Which of the following is closest to your way of thinking on investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) What did you think about your opponent's investment?

1. I always expected how much my opponent invests.

(6) This is the question for the one who chose 1. in (5). How often did your expectations come true?

2. (80) % of expectations came true.

(7) Did you notice anything about your opponents' investment numbers? How did you behave in response to them?

I thought that my opponent did not try to make my payoff as small as possible. Rather, my opponent seemed to attempt to get a reasonable payoff even if his payoff was similar to mine. Therefore, I also chose the same investment number as the expected number my opponent would choose. Moreover, none choose a large investment number, say 24, nor a very small investment number because they are not profitable at all.

(8) Finally, What would be the best choice for your investment? What do you think from your experience in the experiment? Why?

It is steady and good to make an investment decision so as to receive a reasonable payoff constantly, regardless of my opponent's investment number. In deciding my investment number, I should not expect the investment numbers that my opponent would hardly choose, even if my payoff might be large when he happens to choose them. It is not exciting, but I do not like to go on a gamble because I know others have similar ideas. I do not think it is a good choice to make my opponent's payoff small, because my opponent loses only once and my payoff does not become large. Moreover, I need to expect carefully how my opponent behaves when deciding an investment number.

4. Data for the Tsukuba B Session (with the "Opponent" Wording)

4.1. Pairs of Subjects (ID Numbers) in the Tsukuba B Session: the Same as the Tsukuba A Session (see Table 3.1.).

4.2. Participation Decisions of Each Subject in the Tsukuba B Session: 1 = Participate, O = Not Participate

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	0	1	1	0	0	0	0	0	0	1	1	1	1	0	1	1	0	0	0	0
Period 2	0	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0
Period 3	1	1	1	0	1	1	1	1	1	0	1	1	1	0	0	1	1	0	0	0
Period 4	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	0	1	0
Period 5	1	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1	1	0	1	1
Period 6	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Period 7	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Period 8	1	1	1	0	0	1	0	1	1	1	1	1	0	0	1	1	0	0	1	0
Period 9	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0
Period 10	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
Period 11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
Period 12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Period 13	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
Period 14	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
Period 15	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

4.3. Participation Decisions of Each Subject's Opponents in the Tsukuba B Session: 1 = Participate, O = Not Participate

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	1	1
Period 2	0	0	1	1	0	0	0	1	0	0	1	1	1	1	0	1	1	1	1	1
Period 3	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0
Period 4	1	1	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1
Period 5	1	1	1	1	0	1	1	0	0	0	1	1	1	0	1	1	1	0	1	1
Period 6	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Period 7	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 8	1	1	1	0	0	1	1	1	1	1	0	1	0	0	1	1	0	1	0	0
Period 9	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1
Period 10	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1
Period 11	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Period 12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
Period 13	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
Period 14	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1
Period 15	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1

4.4. Investment Numbers of Each Subject in the Tsukuba B Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1		8	7							7	7	11	11		7	8				
Period 2		9				0	11		7	11	8	7	6		11	7	6	0		
Period 3	8	11	9		7	0	6	8	7		7	6	7			8	6			
Period 4	6		7	11	7	11		6	8	7	7	6	7		7	8	6		6	
Period 5	8	8				8	6		7	8	8	6	8		7	8	9		6	8
Period 6		8	6	7	6	11	6		8	7	8	6	8	8	7	8	8	9	7	6
Period 7	7		7	11	7	8	7	9	5	7	8	8	8	9	7	7	7	7	8	
Period 8	4	8	6			11		8	8	7	7	8			7	8			11	
Period 9	8	6			7	11	6	8	7	7	8	8	8	8	5	8		11		
Period 10	7	8	7		7	11	6	9	7	7	7	8	8	6	7	7	6		8	7
Period 11	3	8	7	8	7	0	6	7	7	7	8	8	8	8	7	8	8		8	
Period 12	8	9	7	8	7	8	7	6	7	7	8	8	8	8	7	7	8	7	8	
Period 13	8	8	10	8		11	7	7	7	7	8	8	8	8	7	8	8		8	
Period 14		8	7	8	7	9	7	7	7	7	8	8		8	7	7	6	11	8	
Period 15	8		7	8		8	11	9	7	8	8	8	8	8	7	7	6	7	8	

4.5. Investment numbers of Each Subject's Opponents in the Tsukuba B Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1		7							7	8					8	7		11	11	7
Period 2			11	0				9			0	6	7	11		6	7	8	11	7
Period 3			6	8			7	6	7	8	7	8	6	0	7		9	11		
Period 4	7	11	6			6		6	8	7		7	6	7	7	8	6		11	7
Period 5	8	8	8	7		6	8				8	8	6		9	8	7		8	6
Period 6		8	8	6	8	7	8		6	11	6	7	6	8	6	7	9	8	8	7
Period 7	8	7			8	7	7	7	7	9	8	7	8	7	5	9	7	8	7	11
Period 8	8	8	7			8	7	7	4	8		11			6	8		11		
Period 9	8			11		8	5	8	8	8	8	7	7	8	6	11	7			6
Period 10	6	8	8	7	7	7	9	6	11	7		7	8	7	8		7	7	7	6
Period 11	8	7	8	7	8		8		8	8	7	8	3	8	8	7	7	7	6	0
Period 12	7	7	8	8	8	8	7	7	6	7	8	7	8	7	9		8	8	8	7
Period 13	8	8		8		8	8	7	8	8	8	8	7	7	7	7	11		8	10
Period 14	8	6	7	7	8		8	8	7	7	7	7	9	7	8	7	8			11
Period 15	8	8		8	7			8	7	6	7	7	8	8	8	8	8	7	9	11

4.6. Pairs of Investment Numbers in the Tsukuba B Session (blank means non-participation and boldfaced numbers indicate data of subjects who did spiteful behavior).

Period 1			Period 2			Period 3			Period 4			Period 5			Period 6			Period 7			Period 8		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,6			1,5			1,10	**8**		1,3	6	7	1,16	8	8	1,8			1,12	7	8	1,9	4	8
2,10	8	7	2,8	**9**		2,18	11		2,4		11	2,11	8	8	2,14	8	8	2,3		**7**	2,16	8	8
3,9	**7**		3,7		11	3,17	9	6	5,20	**7**		3,10		**8**	3,13	6	8	4,20	11		3,15	6	7
4,8			4,6		**0**	4,16		**8**	6,19	11	6	4,9		**7**	4,12	7	6	5,19	7	8	4,14		
5,7			9,20	**7**		5,15	**7**		7,18			5,8			5,11	6	8	6,18	8	7	5,13		
11,20	**7**		10,19	11		6,14	**0**		8,17	6	6	6,7	8	6	6,10	11	7	7,17	7	7	6,12	11	8
12,19	11		11,18	8	**0**	7,13	6	7	9,16	8	8	12,20	6	8	7,9	6	8	8,16	9	7	7,11		**7**
13,18	11		12,17	7	6	8,12	8	6	10,15	7	7	13,19	8	6	15,20	7	6	9,15	**5**	7	8,10	8	7
14,17			13,16	6	7	9,11	7	7	11,14	**7**		14,18			16,19	8	7	10,14	7	9	17,20		
15,16	7	8	14,15		11	19,20			12,13	6	7	15,17	7	9	17,18	8	9	11,13	8	8	18,19		11

Period 9			Period 10			Period 11			Period 12			Period 13			Period 14			Period 15		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,11	8	8	1,17	7	6	1,13	3	8	1,18	8	7	1,2	8	8	1,19		**8**	1,4	8	8
2,20	**6**		2,13	8	8	2,5	8	7	2,15	9	7	3,20	**10**		2,17	8	6	2,6		**8**
3,19			3,12	7	8	3,4	7	8	3,14	7	8	4,19	8	8	3,16	7	7	3,5	**7**	
4,18		11	4,11		**7**	6,20	**0**		4,13	8	8	5,18			4,15	8	7	7,20	11	
5,17	**7**		5,10	7	7	7,19	6	8	5,12	**7**	8	6,17	11	8	5,14	**7**	8	8,19	9	8
6,16	11	8	6,9	11	**7**	8,18	**7**		6,11	8	8	7,16	7	8	6,13	**9**		9,18	**7**	7
7,15	6	5	7,8	6	9	9,17	**7**	8	7,10	7	7	8,15	7	7	7,12	7	8	10,17	8	6
8,14	8	8	14,20	6	7	10,16	7	8	8,9	6	**7**	9,14	**7**	8	8,11	7	8	11,16	8	7
9,13	7	8	15,19	7	8	11,15	8	7	16,20	**7**		10,13	7	8	9,10	**7**	7	12,15	8	7
10,12	7	8	16,18	**7**		12,14	8	8	17,19	8	8	11,12	8	8	18,20	11		13,14	8	8

4.7. Payoffs of Each Subject in the Tsukuba B Session

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	706	6526	2210	706	706	706	706	706	4018	7340	2210	2658	2658	706	7340	6526	706	8278	8278	4018
Period 2	706	2523	8278	706	706	706	2658	5907	2210	2658	2386	5681	6339	8278	2658	5681	6339	4904	8278	4018
Period 3	2386	2658	5765	4904	2210	706	6339	5766	6478	4904	6478	7237	5681	706	4018	2386	8209	8278	706	706
Period 4	6339	8278	5681	2658	2210	5504	706	5515	7345	6478	2210	6339	5681	4018	6478	7345	5515	706	10384	4018
Period 5	7345	7345	4904	4018	706	5766	7237	706	2210	2386	7345	7237	5766	706	8271	7345	6481	706	7237	5766
Period 6	706	7345	7237	5681	7237	6114	7237	706	5766	10339	5766	6339	5766	7345	5681	6526	8225	7250	7340	6339
Period 7	7340	4018	2210	2658	7340	6526	6478	6481	6115	8271	7345	6526	7345	6481	4950	8271	6478	7340	6526	8278
Period 8	6751	7345	6339	706	706	6765	4018	6526	4420	7340	2210	10173	706	706	5681	7345	706	8278	2658	706
Period 9	7345	2003	706	8278	2210	6765	4762	7345	7340	7340	7345	6526	6526	7345	5272	10173	4018	2658	706	3244
Period 10	5681	7345	7340	4018	6478	6114	8209	5765	10339	6478	2210	6526	7345	6339	7340	2210	6339	4018	6526	5681
Period 11	6383	6526	7340	6526	7340	706	7237	2210	7340	7340	6526	7345	3831	7345	7340	6526	6526	4018	5766	706
Period 12	6526	6481	7340	7345	7340	7345	6478	6339	5681	6478	7345	6526	7345	6526	8271	2210	7345	7340	7345	4018
Period 13	7345	7345	2615	7345	706	6765	7340	6478	7340	7340	7345	7345	6526	6526	6478	6526	10173	706	7345	7031
Period 14	4904	5766	6478	6526	7340	2523	7340	7340	6478	6478	6526	6526	5907	6526	7340	6478	7237	2658	2386	8278
Period 15	7345	4904	2210	7345	4018	2386	2658	7250	6478	5766	6526	6526	7345	7345	7340	7340	7237	6478	8225	8278

4.8. Record Sheets and Questionnaires for the Tsukuba B Session

ID Number = 1, Female, Earnings = 2568 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I chose participation to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	3980	Because I expected that my opponent would choose a large investment number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected that a high payoff when choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	8	3976	Because I expected that my opponent would choose a large number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get at least 500 by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	6	3400	Because I expected that my opponent would write a number around 10.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected a higher payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	3	2038	Because I expected that my opponent's investment number would be around 7.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected my opponent to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected my opponent to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because my payoff would be higher than 706 by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	If I choose 8, then my opponent's payoff is 4904 and my payoff is 2386. If I choose 11, then my opponent's payoff is 8278 and my payoff is 2658. My payoff changes little, while my opponent's payoff does much.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would certainly be higher than 706 by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because I expected that my opponent would choose a middle investment number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would be higher than 706 with high probability.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a number around 6.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that my opponent would be about to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing non-participation is risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that my opponent would invest around 7 units.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing non-participation is risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	8	6751	Because I expected that my opponent would choose a middle investment number.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because both payoffs would be high if both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a similar investment number.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because both payoffs would be high if both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because I expected that my opponent would choose a middle number.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	8	6383	Because I expected that my opponent would choose an investment number about 8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected that my opponent would choose a similar investment number.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a similar investment number.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected that my opponent would be about to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a similar investment number.

ID Number = 1, Female, Earnings = 2,568 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

In particular I looked at Table 1 when I decided my investment number. If someone invests 24 units, he loses heavily, while his opponent has a big money. I wonder if such a person exists. Because choosing a large number or a small number is risky, everybody tended to choose about 8.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).
It is desirable that my payoff is as high as possible, while my opponent's payoff is as small as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

When I did not participate in investment, I expected my payoff would be high by my opponent's investment. However, because my opponent had the same idea, we destroyed ourselves. Therefore I tried to avoid non-participation. After all, the payoffs were often high when both participated in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

At early periods I chose the numbers randomly. But my opponents' investment numbers have been almost fixed from a middle. Thus I chose numbers leading to high payoffs for those numbers.

When your opponent did not participate in investment:

I chose the number so that only my opponent did not get a large payoff. For example, if I choose the number maximizing my payoff, then my opponent's payoff is about 8000. On the other hand, if I choose a number (8) so that my payoff is not much different from the maximal payoff, then my opponent's payoff is about 5000. Therefore I chose the latter.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think the best choice would be to participate in investment and invest about 8 units. This is because both I and my opponent receive reasonable payoffs.

ID Number = 2, Male, Earnings = 2852 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected a reasonable payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	Because I thought that my payoff would be large by choosing this number with high probability, taking account of my opponent's investment number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I expected a higher payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my payoff is maximized by choosing this number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my payoff would be larger when my opponent chooses participation, but I do not, comparing with the case in which both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The average payoff is higher by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	3981	There is good probability that my payoff is high by choosing this number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I am afraid that my payoff would be low if my opponent chooses non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my opponent also chose participation, I expected to receive a reasonable payoff safely and could avoid a big loss by choosing around 8.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I am afraid that my payoff is low (706) if both choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9		2523	Because my opponent did not participate in investment, I reduced his payoff to the permissible level.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I attempted to avoid the situation in which both choose non-participation and the payoffs are 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is maximized by choosing this number.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my payoff would be larger when my opponent chooses participation, but I do not, comparing with the case in which both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to avoid the worst situation (neither of us participates in investment).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because there is high probability that I steadily obtain a reasonable payoff.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be large when I do not participate in investment, but my opponent does. However, when neither of us participates in investment my payoff is small. Therefore, I chose participation to receive a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I could receive a reasonable payoff steadily.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully my opponent participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing participation is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	By choosing this number, I could ensure a reasonable payoff.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		My opponent would not choose a large investment number even if he participates in investment, but I do not. Therefore I expected a large payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I chose the number so that my opponent's payoff was reduced to the extent that the decrease in my payoff is acceptable.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can expect a reasonable payoff and there is high probability that my opponent will participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because both payoffs are large even when I consider my opponent's payoff.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can expect a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because choosing this number is the safest choice.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I can expect a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	Choosing 9 is not safe as doing 8, but my payoff might be higher and the loss would be small.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		With higher probability I can expect a larger payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I can steadily receive a reasonable payoff for any investment number of my opponent.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing this number would maximize my payoff when considering my opponent' behavior.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		From data at the previous periods, there is high probability that my opponent will participate in investment. If this happens, I may receive a large payoff by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

ID Number = 2, Male, Earnings = 2,852 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I often used the payoff tables for the case in which both participate in investment. Considering not only my benefit but also my opponent's behavior carefully, I chose the number maximizing my payoff.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

2. If my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At first glance I thought non-participation might be more beneficial than participation. However, when I did not participate in investment, but my opponent did, the number that my opponent chose was smaller than the number maximizing his payoff. Then my opponent did not lose much, while I lost very much, comparing with the case in which my opponent chooses the number maximizing his payoff. After all, I could receive a higher payoff by participating in investment. Also, I would like to avoid the case in which neither of us participates in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

My opponent did not want to lose in his payoff, either. Considering this point, I tried to maximize my payoff.

When your opponent did not participate in investment:

I prevented my opponent from receiving a large payoff, as long as the reduction of my payoff was permissible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think that the total profit would be larger by participating in investment at all periods, because of the reasons mentioned above.

ID Number =3 , Male, Earnings = 2530 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		When participating in investment, I can control my payoff by choosing an investment number.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	12	7172	Because my opponent would not choose a large number at the first time.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected a higher payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	3491	The same as the above.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	6432	Because my payoff would be large with high probability.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I am sure that my payoff is low when I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	24	24369	I expected that my opponent's investment number would be around 10.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To look at what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Because I did not like that my opponent' payoff was large.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I could ensure at least 7000 payoff by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I did not participate in investment at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	Because I expected that my opponent would invest about 10 units.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to maintain at least 10,000 payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	My opponent's investment number would be small.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my payoffs were only about 6,000 when I chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because choosing this number would ensure a reasonable payoff on average.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I do not like the situation in which neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I considered the balance of my opponent's payoff (and my payoff).

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as period 6.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		To look at what will happen.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.			706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected that my opponent's investment number would be between 6 and 8.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is less risky than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the previous period.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get a reasonable payoff constantly by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected that my opponent would choose 8.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I attempted to avoid the situation in which neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10		2615	I tried to get a large payoff and I also considered my opponent's payoff.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the previous period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected that my opponent would choose 8.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the pervious period. My payoff would be 6000-7000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I made my opponent' payoff not large.

ID Number =3 , Male, Earnings = 2,530 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

My payoff is quite low when my opponent does not participate in investment.
I almost always used Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods, I expected that if I did not participate in investment, my opponent would invest 10 or 11 units to maximize his payoff, and thus my payoff would be 7000 or 8000. However, my actual payoffs were lower than these expected value, because my opponents chose smaller numbers. Or my payoff was 706 because my opponent did not participate in investment, either. Therefore I usually participated in investment at later periods.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose 7 because my payoff would be reasonable on average and my opponent's payoff would not be very high.

When your opponent did not participate in investment:

I chose 7 to make my opponent's payoff small.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

My opponents did not choose large investment numbers, neither did I. This is because they did not like that the payoff of their opponent was higher than their own payoff. Most people invested 7 or 8 units. But by investing 7 or 8 units, I had damage because my opponents did not participate in investment often. I think that investing 7 or 8 units is good when my opponent participates in investment.

ID Number = 4, Male, Earnings = 2291 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	7234	Expecting my opponent would choose 12 or 13.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Expecting many people would choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I did not participate in investment at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	9	4383	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my success at period 1. I did the same thing.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	My payoff is maximized by choosing this number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because my payoff would be 8278 if my opponent participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I tried non-participation one more time.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.		8	4904	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my failures at periods 1-3.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	My payoff is largest by choosing this number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because of my failure in period 4.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because non-participation did not work well.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because I expected that my opponent would choose 8-11.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participation worked better than non-participation did.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is largest by choosing this number.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because non-participation went well at period 9.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent did not choose 11 in the case × O (in which I did not participate in investment, but my opponent does).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because many people chose 7 or 8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

ID Number = 4, Male, Earnings = 2291 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (1) in Practice.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I thought nobody would invest more than 11 units.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods I expected that if I did not participated in investment, then I could receive high payoffs because my opponents would invest 11 units. However my opponents did not do so. Therefore I have participated in investment from a middle.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Because many people chose 7 or 8, I chose a number in an attempt to make my payoff as large as possible for such a number.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. Choose 7 or 8 when the opponent participates in investment, and choose 11 when he does not.

ID Number =5 , Male, Earnings = 1889 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to know what my opponent would do.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	14	8885	I expected that my opponent would invest about 10 units, and chose the investment number maximizing my payoff under that expectation.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to know what my opponent would do one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	10	5688	Because my payoff would be at least 5000 if my opponent invests at least 9 units.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected that my opponent would choose "participation" and wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	2299	Because I expected that my opponent would invest 13 units.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	Because I expected that my opponent would invest 10-13 units.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that my opponent would choose participation, and I wanted to get a reasonable payoff safely at the first period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	I made a wrong estimate.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that my opponent would choose participation this time, and I wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	I made a wrong estimate again.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my failures at the previous two periods. I tried to recover my loss.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent expected that I would invest 11 units. Instead, I reduced my opponent's payoff half by choosing this number.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I wanted to get a reasonable payoff this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent expected that I would invest 11 units. Instead, I reduced my opponent's payoff half by choosing this number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		My opponents at the previous four periods chose "non-participation," and so my opponent at this period would choose "participation."
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff is only 706 if neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I expected that my opponent would invest 10 or 11 units.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I have to participate in investment once more, in order to recover my loss.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that my opponent would invest 9 or 10 units.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because all would feel that participation is more advantageous, I counterplotted their plans.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent expected that I would invest 11 units. Instead, I reduced my opponent's payoff half by choosing this number.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because I expected my opponent would invest 9 or 10 units.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent would invest 9 units.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because my opponent would invest at most 8 units, I wanted to get a higher payoff than my opponent does.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I wanted to get a little higher payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to avoid the situation in which neither of us participates in investment and the payoff is 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected my opponent would invest 7 or 8 units.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I went on the gamble because this is the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

ID Number =5 , Male, Earnings = 1889 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (3) in Actual Experiment

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I thought none would invest more than 12 units as soon as I looked at Payoff Table 1. Payoff tables 2 and 3 were not necessary for me. I realized that investing 8 units would be best to receive the maximal payoff. By using Payoff Table 1, I considered which investment number maximize my payoff for each investment number of my opponent, and I realized that the best choice is to invest 8 units.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Basically, participation in investment is less risky and safe. However, when I expect my opponent to participate in investment, non-participation in investment is more beneficial theoretically.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I invested 7 units because I expected that my opponent would invest 8 units. By investing 7 units instead of 8 units, my payoff decreases only by 5, while my opponent's payoff decreases by at least 800.

When your opponent did not participate in investment:

Clearly my opponent intended to receive 8278 payoff, expecting that I would invest 11 units. I was angry about it. Therefore, I invested 7 units so that my opponent's payoff was about the half of 8278.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?
(No answer)

ID Number = 6, Male, Earnings = 2158 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I participated in investment to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	14	8	3692	Because I like this number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		As a first step I did not participate in investment to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I participated in investment for a trial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	24	20690	Because my opponent's payoff was larger than mine at practice 1.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to participate in investment and invest 24 units, because this is practice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24	2	500	I invested 24 units to make my opponent happy for a moment and shake him.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because my opponent would participate in investment perhaps.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The payoffs of all subjects would increase by choosing participation, instead of continuing to choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I do not want to lose a game against my opponent. Life is not so easy.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I hate my opponent's attitude. He only considers his own payoff. Think of the payoffs of others.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	6	5504	My opponent would choose around 8, and I sacrificed my payoff by choosing 11.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	This number would be the safest one which minimizes my loss.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	6114	Choosing 11 would be best if the payoffs of all subjects are considered.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected my opponent would choose 6-8.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	Choosing 11 would be best if the payoffs of all subjects are considered.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	6114	I have received reasonable payoffs recently, and so it matters little to me which number should be chosen.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	It would be best to punish my opponent by reducing his payoff even if my payoff also decreases. Life is not so easy. What did my opponent think? I prevented him from receiving a high payoff.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would choose a number around 6-8. I should choose 8 to maximize my payoff.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	Choosing 11 would be best if the payoffs of all subjects are considered.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	9		2523	I chose 9 on sufferance, but I will never choose 11. There are many mean fellows. I feel sick. I will never descend to such meanness.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	8		2386	This is the final period. How silly you are! But I never write 24. Feeling sick.

ID Number = 6, Male, Earnings = 2158 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

It is desirable that the sum of my payoff and my opponent's payoff is as high as possible, unless my opponent is mean.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods I cared only about my payoff and did not participate in investment. But the others did not, either. Because non-participation was not beneficial as a whole, I decided to participate in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I considered the sum of my payoff and my opponent's payoff. Perhaps my opponent would choose around 6, 7, or 8, and so I chose around 11.

When your opponent did not participate in investment:

I invested 0 units so that both payoffs were 706. I was very angry about my opponent because he cared only about his own payoff. But at later periods I invested some units out of pity.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

We should make investment decisions to maximize the sum of my payoff and my opponent's payoff. I am irritated when my opponent considers only his own payoff.

ID Number = 7, Female, Earnings = 2620 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent would not participate in investment to see what happens or he would invest a small amount at the first time.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	12	7	3792	Because my opponent would invest a small amount to look at what would happen.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, but my opponent does, my opponent would definitely choose 13.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	3	9	4039	Because my opponent would invest a relatively large amount.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be limited to some degree if I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	12	7172	My opponent would invest 7-9 units of money, and I chose this number to receive a reasonable payoff safely under that expectation.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	10	5688	Because I expected that my opponent would choose a large investment number as at practice 3.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		If I do not participate in investment, but my opponent does, my opponent would invest 11 units of money to maximize his payoff. (Whether or not my opponent participates in investment is left to chance.)
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I recognized some persons have the similar idea.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I chose the number which maximizes my payoff because I knew my opponent did not participate in investment.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		There is good probability that my opponent would choose non-participation. But I do not like the case in which my payoff is only 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because my opponent would invest a secure number when he participates in investment.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that someone would participate in investment to avoid falling together.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		2658 is better than 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I expected that my opponent would invest 6-9 units.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to have a bet one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I perceived that my opponent might be fool (the opponent at the last period did not choose the number maximizing his own payoff).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	5	4762	I expected that my opponent would choose 7-9.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of the reasons at periods 5 and 9.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	7	7	6478	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I chose the number maximizing my payoff.

ID Number = 7, Female, Earnings = 2620 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

By choosing around 7-9, I can constantly get 6,000-7,000 points if my opponent also takes a safe strategy. There would be little people who invest more than 9 units. All of us would receive similar payoffs if we just understand the rules.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).
   It is desirable that my payoff is high and the difference between my payoff and my opponent's is large.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

If I do not participate in investment, then it is possible that my opponent may not either, and both may get low payoffs. Also, I expected a high payoff in the case ×O (in which I did not participate in investment, but my opponent did). However, in that case, my payoff was not so high, because my opponent thought that if he could make his opponent's payoff as small as possible, it was fine that his payoff was moderate.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I took a safe strategy (chose around 7-9), because of the reason specified in (3).

When your opponent did not participate in investment:

I tried to maximize my own payoff, regardless of my opponent's payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

One should participate in investment if his prime concern is his own payoff. I would like to avoid the case where neither of us participates in investment and both receive low payoffs. Investing more than 9 units would just make my opponent happy, because my payoff is not high, while my opponent's payoff is quite high.

ID Number = 8, Male, Earnings = 2476 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be more beneficial than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	6	3400	Because choosing this number would make less mistake.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be more beneficial than non-participation
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	10	5095	I wanted to try several numbers.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to try several numbers by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24	8	500	I wanted to try several numbers.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Choosing this number is most profitable.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Hopefully my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because there is some probability that my payoff will be large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing this number would be profitable.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Choosing this number would be profitable.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Hopefully my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	I want to get a high payoff.

Period 8 of the Actual Experiment

w	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my opponent would choose a number between 6 and 8.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Hopefully my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	My opponent would choose 6 or 7.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	My opponent would choose 8 or 9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I did not give my opponent a large payoff.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish that my opponent would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I wish that my opponent would choose 8.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing 7 would be most profitable.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Choosing 7 would make little mistake.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	There is some probability that my payoff is large.

ID Number = 8, Male, Earnings = 2476 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

First I thought that the case × O where I did not participate in investment, but my opponent did would be most beneficial to me. In this case, however, my opponents rather reduced my payoff than maximized their own payoffs. Therefore I found that the case O O where both participate in investment was most beneficial to me in a middle of the experiment.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I thought that the case where I did not participate in investment, but my opponent did would be best for me. However, I found that non-participation was not so profitable and very risky in a middle of the experiment, and so I participated in investment at all the rest of periods.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose 6-8, because my payoff was reasonable and my opponent's payoff was not very high.

When your opponent did not participate in investment:

I rather reduced my opponent's payoff than maximized my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It would be best to participate in investment and choose around 6-8 at all periods, because my payoff would be reasonably high and be similar to my opponent's payoff.

ID Number = 9, Male, Earnings = 2955 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is clear that there is a big loss when both choose 'non-participation'.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	Because I expected that my opponent would choose the average investment number (12).

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I took a bleak.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my failure at practice period 2.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		1282	I do not like to write the number 13 simply (to maximize my payoff).

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		'Non-participation' is not a fun. Because this is practice, I would like to have a fun.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	10	4393	I wanted to see what would happen if I choose a wild number before the actual experiment.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Everyone would participate in investment, because there is enough time (ten minutes) to consider. I took a counterplot.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I was revenged for non-participation at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	If I choose the number maximizing my payoff, my opponent's payoff is very large. I am angry about it.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing non-participation is boring in this game.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	My opponent would choose 8-10.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is efficient for me to participate in investment as far as my opponent also does.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Everyone seems to be experienced and so my opponent would choose 6-9.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	If I choose the number maximizing my payoff, my opponent's payoff is very large. I am angry about it.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	My opponent would choose 7 or 8.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	7	6115	To reduce my opponent's payoff.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	4	4420	Choosing this number would result in a reasonable payoff safely (I halt an attack on my opponent).

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	10339	Because it would be most efficient to choose this number as at period 9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Everyone seems to settle down to choosing 7 or 8. Because I will never meet the same person, it is interesting to choose 7 to spite my opponent.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above. Spiting my opponent means reducing his payoff.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

ID Number = 9, Male, Earnings = 2,995 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

Payoff tables 2 and 3 are little meaningful. I almost always the north-west side of Payoff Table 1, because none would choose a large investment number.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).
It is desirable that my opponent's payoff is not larger than my payoff, and my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I intended to give my opponent a metal blow by choosing non-participation. However, I found it meaningless at early periods.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I tried to choose the number that is smaller than my opponent's number by 1. This is because my payoff is larger than my opponent's by doing so.

When your opponent did not participate in investment:

My opponent tended to receive a high payoff. I tried to reduce my opponent's payoff as far as my payoff did not decrease much.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Non-participation in investment often results in a loss, because my opponent may not participate in investment, or my opponent can control my payoff when he participates in investment. Concerning investment numbers, it is important to balance my investment number and my opponent's.

ID Number = 10, Male, Earnings = 3199 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	Because by choosing this number, I would surely receive a reasonable payoff.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		1148	I did not like that my opponent got a large payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	13	7844	From my experience at practice 1. Then I got a large payoff.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to choose 'non-participation' once at least.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I failed by choosing non-participation at practice 4.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that my opponent would choose a similar number.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my success at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because choosing this number maximizes my payoff.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		At period 2 my opponent did not participate in investment and I felt mortified.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected that my opponent would choose around 8.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I will not choose 0 if my opponent does not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	Not in particular.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is significant to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	10339	Not in particular.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	7 is a lucky number.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment from now on.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I will continue to choose 7.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I like to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I like the number 7.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be profitable to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing 7 would be reasonable.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected that my opponent would choose about 7.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I like to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because my opponent would choose 6-9.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent would also participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	7	8	7340	Because my opponent would choose around 7.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.	8	6	5766	I found choosing 8 would be better than choosing 7.

ID Number = 10, Male, Earnings = 3199 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

Not in particular.
I used Payoff Table 1 when both I and my opponent participated in investment. I used both Payoff Table 2 and Payoff Table 3, when my opponent participated in investment, but I did.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Participation would be good both for me and for my opponent (if my opponent also participates in investment).

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I always chose 7. But I think I could receive higher payoffs by choosing 8 instead of 7.

When your opponent did not participate in investment:

At the first time I chose the number maximizing my payoff. At the second time I chose a smaller number so that my opponent did not get a high payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think that I should care only about my payoff and always invest 8 units. Also, non-participation should not be chosen, because it makes my opponent feel uncomfortable and I may not receive a high payoff.

ID Number = 11, Male, Earnings = 2633 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I did not participate in investment because everyone would participate in investment at the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number		6	1416	

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Something tells me that non-participation would be more profitable than participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	1815	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I feel non-participation would make both worse-off.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	3918	Because my opponent's investment number would be small.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	3915	Because I expected that my opponent's investment number would be 6-8.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Non-participation is never profitable. My opponent would participate in investment if he is not silly.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	This person, No. 20, did not understand the situation at all even after 4 periods of practice. Choosing '7' will teach him a good lesson.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	0	2386	I found that choosing '8' would be most profitable to the average investment numbers of my opponents, 6-8, over 4 periods of practice.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The case O O is better than the case × O. Clearly, if both invest 6-8 units, both receive reasonable payoffs and can avoid big losses.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing this number is safe.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Why did not my opponent participate in investment? Someone might not participate in investment at the latter periods with psychological warfare. But this is still the begging of the game. Why did not he choose a profitable action? You should make a profit rather than enjoy yourself. Did you understand it?

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The case × O is more profitable than the case × O, but the case O O is most profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Choosing this number is safe and most reasonable. If both of us choose 7 or 8 without any serious consideration, we can get good profits with less effort.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	No other choice.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	(8, 8) would be settled.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	If you invest 0, your opponent does not more than 8. I cannot see why my opponent did not understand it.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	No outcome other than (8, 8) will occur.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Why are you so silly, No. 4? Think about the meaning of investment. The average investment number in the market has already been known.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The person who does not participate in investment must be foolish. Why should I participate in investment? Because I can increase my own money.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	If my opponent invest in an attempt to maximize his profit, he should write 8 because the average investment number is 8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.	8	7	6526	The same as the above.

ID Number = 11, Male, Earnings = 2633 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used only Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

The case O O (where both I and my opponent participate in investment) is more beneficial to both me and my opponent than the case O× (in which I participate in investment, but my opponent does not) and the case ×O (in which my opponent participates in investment, but I do not). This is clear from the fact that the average investment number is around 6-8. It is hard to find the reason why non-participation is more advantageous than participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

The average investment number was around 6-8. Thus I almost always chose 8 so that both my payoff and my opponent's payoff were high.

When your opponent did not participate in investment:

I chose 7 to receive a moderate payoff. I also intended my opponent to realize the disadvantage of non-participation.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

First of all, the purpose of investment is to increase my own property. It is not desirable to compete with others and trip others up because it may lead to my own loss. It is good to participate in investment positively in order to capture the state of the market. By investing 8 units, my payoff is highest for the average investment number 6-8. If my opponent also realizes this fact, both of us receive high payoffs.

ID Number = 12, Male, Earnings = 3284 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to see how my opponent behaves when I participate in investment (because this is practice).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest.Num.	7	10	5688	From the payoff tables, I would get a reasonable payoff on average by investing this amount.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I would like to see how my opponent behaves when I do not participate in investment. (Perhaps he would choose 13.)
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	To prevent my opponent from getting a large payoff.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		1148	To prevent my opponent from getting a large payoff.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Choosing this number maximizes my payoff.

Period 2 of the Actual Experiment

w	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is not fun to choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because my payoff would be high on average by choosing this number.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent's payoff is surely small if I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because my payoff would be high on average.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my payoff as well as my payoff would be high on average.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, my opponent's payoff is small. Also I risk my payoff because the case × × might happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Both I and my opponent would receive high payoffs on average. (Choosing 8 is better than choosing 6 or 7 if my opponent chooses 6, 7, or 8.)

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

ID Number = 12, Male, Earnings = 3284 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I always used Payoff Table 1 to make decisions.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Non-participation always makes my opponent's payoff low.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Basically I chose 8.

When your opponent did not participate in investment:

I chose 11 to maximize my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

By Payoff Table 1, I found my best investment number for each investment number of my opponent (11 for 0, 11 for 1, ..., 8 for 8, ..., 0 for 24). When both I and my opponent choose 8, I choose my best number for the number he chooses, and my opponent also chooses his best number for the number I choose. This situation would be less risky for both. Therefore I think choosing 8 is the best choice.

ID Number = 13, Male, Earnings = 2798 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I tried participation because this is practice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	12	7206	By looking at the supplemental tables 1-2, I thought there is high probability that choosing this number will make my payoff high.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get used to this experiment. The same as period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	4	2708	I expected that everyone would reduce his investment number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be disadvantageous to declare non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	10	5596	My opponent would choose a number between 3 and 10.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		To look at what happens.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I would get 8000 if I do not participate in investment, but such an action is risky at the first time. I want to try non-participation after accumulating enough payoffs.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	The only thing I can do is to choose 11 to receive the highest payoff.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I had better looking at how my opponent behaves.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I am happy if my opponent chooses 8 or 9. I hope so.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Investing nothing (non-participation) is not a good choice at this stage. I will do it only after my payoff per period has been constantly at least 5000 (my goal is to get at least 5000 points per period).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	My opponent would choose a number between 5 and 11. Choosing 7 is safe both when my opponent's number is 5 and when it is 11.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I continue to participate in investment until my payoff per period has been constantly at least 5000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing this number would be best if my opponent chooses a number between 6 and 8. I can get 5000 points even if he chooses 5.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		At previous three periods, my opponents chose participation and invested 6 units. My opponent at this period would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I get 8278 points in the case 0-11 and 7345 points in the case 8-8. I prefer the latter to the former.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Choosing 8 is good if my opponent chooses a number between 6 and 9.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		If my opponent is a normal person, he would invest 11 units, and my payoff would be 8278 points.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get reasonable payoffs constantly.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	My opponent would choose a number between 6 and 8.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	3	3831	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Safety is important for me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, my payoff would be either 706 or 8278. The gap between them is too large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble. Everyone would not participate in investment at the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		There is high probability that my opponent will choose non-participation (×).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	My opponent would choose a number between 6 and 8.

ID Number = 13, Male, Earnings = 2798 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I think only Payoff Table 1 is sufficient.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment only if I went a gamble to get a high payoff.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

My opponents almost always selected 6-8 only. Thus I always selected 8 to receive a high payoff for such numbers.

When your opponent did not participate in investment:

I invested 11 units so that my payoff is as high as possible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

(1) Never participate in investment and get 8278 points at several periods.

Or

(2) Invest 8 units at all periods.

ID Number = 14, Female, Earnings = 2538 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I participated in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	As a first step I chose a middle number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	3	2272	I expected that my opponent would invest at least 10 units.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	3610	I expected that my opponent would invest at least 10 units.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My expectation proved wrong, but it is interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	10	4769	I expected that my opponent would invest at least 7 units.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	I expected that my opponent would invest at least 6 units.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected that my opponent would invest at least 6 units.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest at least 6 units.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest at least 6 units.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest at least 6 units.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

ID Number = 14, Female, Earnings = 2538 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 1 and Supplemental Payoff Table 1-2.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment at early periods. It was interesting to see the various responses of my opponents when I chose non-participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose 6-9, because both my payoff and my opponent's payoff were reasonably high.

When your opponent did not participate in investment:

I chose 11, because I got the highest payoff. I expected my opponent would also choose 11 when I did not participate in investment, but my opponent did. However, this expectation did not come true.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

The best choice would be to participate in investment and choose an investment number so that both I and my opponent get reasonably high payoffs. This is because it was difficult to expect my opponent's investment number when I did not participate in investment.

ID Number =15, Male, Earnings = 3118 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I thought my payoff would be higher by choosing participation than by doing non-participation when looking at payoff tables.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	5000	I expected that my opponent would choose 7 or 8. I expected from the payoff tables that choosing this number would be most beneficial under that expectation.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		From my success in practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because choosing this number maximizes my payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be higher by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	0	1282	Because choosing this number would be most beneficial under the expectation that my opponent would choose 7 or 8.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I thought it is interesting to choose non-participation by observing the results at practice 2 and 3.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		First of all, I will participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent to choose an investment number between 7 and 9.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because my payoff would be higher by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because choosing this number maximizes my payoff.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my failure at period 2 of the actual experiment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the result at period 3 was not good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because I expected my opponent to choose an investment number between 7 and 9.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would be better by participating in investment than by not participating.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	I expected my opponent to choose an investment number between 7 and 9.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	5	4950	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	6	5272	Because I expected my opponent to choose around 6.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent to choose a number between 7 and 9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

ID Number =15, Male, Earnings = 3118 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I mainly took a look at Payoff Table 1 when I decided my investment number. I sometimes used Payoff Table 3.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Before the actual experiment, I decided to choose non-participation only one time.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I selected a number between 7 and 9, because I expected my opponent would select a number between 7 and 9 by looking at Payoff Table 1.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think it is best to participate in investment at all periods, because my payoff with non-participation would be smaller than that with participation. Further I think the best investment number is 7, because my opponent would also choose a number between 7 and 9 many times.

ID Number = 16, Male, Earnings = 3065 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I participated in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	My opponent would invest about half of 24 units. Under this expectation, my payoff is large by investing about 9 units.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I attempted to get a large payoff in the case where both participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	3981	I chose a number close to half of 24 and wanted to look at what would happen.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I would like to avoid the risk that nether participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	To maximize my payoff in the case O ×.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully my opponent would participate in investment and I would get a large payoff by not participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	1815	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be best that both participate in investment and get reasonable payoffs each other.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	My opponent would choose around 10. Under that expectation, I would receive a reasonably high payoff by choosing this number.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Both my opponent and I would like to avoid the risky case (××) where neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I chose a relatively small number to get a reasonably high payoff even when my opponent chose the same strategy.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	I did not permit only my opponent to enjoy a high payoff. So I chose 8 to reduce his payoff, although my payoff also decreases.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected my opponent to choose 7 or 8.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to avoid the risk that neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected my opponent to invest 7 or 8 units.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest 7 or 8 units as I did, and he would take a safe action, but not went on the gamble.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent would expect me to invest 11 units. But I prevent him from getting a high payoff.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would take an action similar to mine.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	The same as period 10.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest around 7, 8, or 9 units as I did.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

ID Number = 16, Male, Earnings = 3065 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The payoff changes variously, depending on my investment number as well as my opponent's.
I referred to Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

There is a heavy loss if neither of us participates in investment. Rather it would be better to participate in investment at all periods and get reasonable payoffs steadily.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected my opponent would also do behavior similar to mine, and I chose a number so that both of us got reasonably high payoffs.

When your opponent did not participate in investment:

I lose heavily if my opponent does not participate in investment. If I try to maximize my own payoff, I play right into my opponent's hands and he gets a high payoff. Therefore I reduced my investment number so that the decrease in my payoff was smaller than the decrease in my opponent's payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is good to participate in investment as many times as possible in order to cooperate with my opponent. I should try to enlarge mutual benefit, not my own payoff only. If both of us choose investment numbers such that our payoffs are close, we will reach an agreement and there will be no battle.

ID Number = 17, Male, Earnings = 3021 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		First of all I tried participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	8	4213	Because I expected that nobody would invest a large amount.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I wanted to try participation one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my opponent did not participate in investment.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Non-participation would be more profitable than participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is more fun to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	4368	Because investing this amount would be most profitable on average.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that everybody would participate in investment at the first period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I felt that my opponent would participate in investment and invest a large amount.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because I felt that my opponent would invest a large amount.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be efficient.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	Because I felt my opponent would invest a large amount.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment for a while.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Because investing this amount is efficient.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment for a while.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	Because I expected my opponent to invest a small amount.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will participate in investment a little longer.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	Because my opponent would invest around 6 or 7 units.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I still participated in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	7	7	6478	My opponent would invest a relatively large amount.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I challenged non-participation although it was risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I am obstinate.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I finally recognized that non-participation would not pay me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected my opponent to invest a large amount.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Wishing I can get a high payoff this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because most of my opponents have invested around 6 or 7 units.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because 'non-participation' is too risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because most of my opponents have invested around 6 or 7 units.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be risky if I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	Because I wanted a high payoff.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is safer than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Hopefully my opponent would invest a large amount.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Off course I participated in investment because this is the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Hopefully my opponent would invest a large amount again.

ID Number = 17, Male, Earnings = 3021 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I took a look at Payoff Table 1 only.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment a few times, because I could receive a high payoff if I did not participate in investment, but my opponent did.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected my opponent's investment number, and then I chose the investment number maximizing my payoff for that expected number.

When your opponent did not participate in investment:

I chose a number so as to make my payoff as high as possible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

The best choice: 6-8
The reason: Because everyone usually invests around 6-8 units, my payoff may become small if I invest larger units or smaller units.

The risk for non-participation is so high that everybody will participate in investment at later periods. In addition, it would be better to submit a participation card and an investment card simultaneously.

ID Number = 18, Male, Earnings = 2430 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	3981	Choosing this number is profitable when my opponent's investment number is small.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff at the previous period was bad.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	4850	My opponent's payoff is at most 3520 when I choose this number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I choose non-participation at this first stage, I meet the wish of my opponent.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	8	2299	I always get a payoff which is better than my opponent's.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	I do not like to receive a payoff which is smaller than my opponent's.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		If my opponent chooses participation (O), it is most profitable for him to invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case in which neither of us participates in investment (××).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	8	4904	I always get a payoff which is higher than my opponent's.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		This would be a safe policy!?
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case ×× (where neither of us participates in investment).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	Choosing this number would be profitable.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Choosing this number maximizes my payoff.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Choosing this number is profitable.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Choosing this number maximizes my payoff.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing this number is profitable.

ID Number = 18, Male, Earnings = 2430 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I mainly used Payoff Tables 1, 2, and 3. Before the actual experiment started, I spend ten minutes to write data of the payoff tables into Supplemental Payoff Tables 2. I never used Supplemental Tables 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

When my opponent participated in investment, but I did not, my opponent almost always chose the number maximizing his payoff and I also received a good payoff.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected that my opponent would choose 6-9. I chose around 7-8 to get a good payoff for such numbers.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

The opponent's payoff should be also considered in selecting an investment number. If I behave selfishly, I might get a large payoff, but might lose a lot. All of us become happy if everyone considers both his own payoff and his opponent's payoff when making an investment decision (this is an ideal).

ID Number = 19, Male, Earnings = 2961 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the case in which neither of us participates in investment and our payoffs are quite low (500).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		1007	By choosing this number, my payoff is not low and my opponent's payoff is not large.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Choosing non-participation is profitable with probability 3/4.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be higher than at practice 2.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	3266	I am selfish and my payoff would be largest by investing this amount.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I practice the same thing as at the previous period once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	2	2038	I expected my opponent's investment number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I had a big bet at the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I again tried non-participation because I got savings at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The third of the payoff obtained at the previous period is compared with the payoff obtained when both participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I safely participated in investment this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	11	10384	Choosing this number would be safest, comparing with the case in which both payoffs are 706.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		This is a safe choice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Choosing a middle number would be profitable as at period 4 of the actual experiment.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the number of my opponents who did not participate in investment decreases.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected my opponent to choose 6, 7, or 8.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My opponent would choose non-participation (×) if he is very greedy.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		If both participate in investment, I do not hurt my opponent, nor does my opponent.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I narrowly escaped from receiving 706.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I was angry that my opponent did not participate in investment at period 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I settled down now. I would like to avoid that my payoff is 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Choosing 8 is safest and it maximizes my payoff when my opponent's number is between 6 and 8.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is a safe strategy. Most people would have the bad experiences that their payoffs are 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everyone seems to understand that participation is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	To punish the person who seeks only his own interest.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	The same as the above. Everyone looks like understanding the situation.

ID Number = 19, Male, Earnings = 2961 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I took a look at Payoff Table 1. I found the number maximizing my payoff for each of my opponents' investment numbers. I realized from a middle of the experiment that I could get the almost largest payoff by investing 8 units. After knowing a knack about investment, I did not need to consider investment numbers carefully.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At the first three periods, I went on the gamble that I did not participated in investment so as to get a large payoff. However I realized that we could prevent a big loss when both of us safely participated in investment and invested 8 units, and so I decided to participate in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:
8: My payoff is maximized by choosing 8 when my opponent invests 6-8 units.

When your opponent did not participate in investment:
11: My payoff is maximized by choosing 11.
8: The decrease of my payoff is relatively small, while the decrease of my opponent's payoff is relatively large.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

If everybody participate in investment and choose 8, none would suffer a large loss. I understood that taking selfish behavior would lead to a serious problem. I am very happy to participate in the experiment.

ID Number = 20, Male, Earnings = 2346 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be safest to participate in investment and invest around 12 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	My opponent would also seek a reasonable payoff steadily.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be profitable with high probability.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	5	2942	Choosing this number would result in a reasonable payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	10	5596	By choosing this number, my payoff would not be bad even when my opponent's investment number is small.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		My opponent would invest 13 units if I do not participate in investment, but my opponent does.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		My opponent would participate in investment at the first time. If so, he would invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I do not understand why my opponent at period 1 invested 7 units. But I tried non-participation once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	The same as the above.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I do not understand why my opponents invested 7 units. I tried participation this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	My opponent would choose 7, 8, or 9.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	6	7	6339	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		If my opponent participates in investment, but I do not, I can only imagine that my opponent would invest 11 units. So I tried non-participation, expecting that my opponent would choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Perhaps most of my opponents at the previous periods did not understand the payoff tables. I did not participate in investment, expecting that my opponent would invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	It cannot be helped.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully my opponent would invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Why? My plan did not work well. I participated in investment to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I had a bet once more. It is not meaningful to seek the safety at this stage.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I do not understand why my opponent chose 0. I had a bet once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Not in particular.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		10	7031	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Choosing 10 is mysterious. Anyway my strategy worked well and so I tried non-participation again.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I decided no to participate in investment. If my opponent do not participate in investment, either, I will simply give up.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

ID Number = 20, Male, Earnings = 2346 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I almost always used Payoff Table 1 only.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

As a matter of fact I planned to choose non-participation at all periods. However I changed my mind, because I could not have things my own way many times.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Because my opponent always invested around 5-9 units, I continued to invest such units.

When your opponent did not participate in investment:

It did not occur.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

If you want to get a high payoff, do not participate in investment and let your opponent invest 11 units to earn 8278 per period (if you opponent do not participate in investment, give up). If you are satisfied with getting a normal payoff, it would be best to invest 7-9 units continuously.

4. Data for the Tsukuba B Session (with the "Opponent" Wording)

4.1. Pairs of Subjects (ID Numbers) in the Tsukuba B Session: the Same as the Tsukuba A Session (see Table 3.1.).

4.2. Participation Decisions of Each Subject in the Tsukuba B Session: 1 = Participate, O = Not Participate

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	0	1	1	0	0	0	0	0	0	1	1	1	1	0	1	1	0	0	0	0
Period 2	0	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0
Period 3	1	1	1	0	1	1	1	1	1	0	1	1	1	0	0	1	1	0	0	0
Period 4	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	0	1	0
Period 5	1	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1	1	0	1	1
Period 6	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Period 7	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Period 8	1	1	1	0	0	1	0	1	1	1	1	1	0	0	1	1	0	0	1	0
Period 9	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0
Period 10	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
Period 11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
Period 12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Period 13	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
Period 14	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
Period 15	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

4.3. Participation Decisions of Each Subject's Opponents in the Tsukuba B Session: 1 = Participate, O = Not Participate

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	1	1
Period 2	0	0	1	1	0	0	0	1	0	0	1	1	1	1	0	1	1	1	1	1
Period 3	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0
Period 4	1	1	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1
Period 5	1	1	1	1	0	1	1	0	0	0	1	1	1	0	1	1	1	0	1	1
Period 6	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Period 7	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 8	1	1	1	0	0	1	1	1	1	1	0	1	0	0	1	1	0	1	0	0
Period 9	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1
Period 10	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1
Period 11	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Period 12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
Period 13	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
Period 14	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1
Period 15	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1

4.4. Investment Numbers of Each Subject in the Tsukuba B Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1		8	7							7	7	11	11		7	8				
Period 2		9				0	11		7	11	8	7	6		11	7	6	0		
Period 3	8	11	9		7	0	6	8	7		7	6	7			8	6			
Period 4	6		7	11	7	11		6	8	7	7	6	7		7	8	6		6	
Period 5	8	8				8	6		7	8	8	6	8		7	8	9		6	8
Period 6		8	6	7	6	11	6		8	7	8	6	8	8	7	8	8	9	7	6
Period 7	7		7	11	7	8	7	9	5	7	8	8	8	9	7	7	7	7	8	
Period 8	4	8	6			11		8	8	7	7	8			7	8			11	
Period 9	8	6			7	11	6	8	7	7	8	8	8	8	5	8		11		
Period 10	7	8	7		7	11	6	9	7	7	7	8	8	6	7	7	6		8	7
Period 11	3	8	7	8	7	0	6	7	7	7	8	8	8	8	7	8	8		8	
Period 12	8	9	7	8	7	8	7	6	7	7	8	8	8	8	7	7	8	7	8	
Period 13	8	8	10	8		11	7	7	7	7	8	8	8	8	7	8	8		8	
Period 14		8	7	8	7	9	7	7	7	7	8	8		8	7	7	6	11	8	
Period 15	8		7	8		8	11	9	7	8	8	8	8	8	7	7	6	7	8	

4.5. Investment numbers of Each Subject's Opponents in the Tsukuba B Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1		7							7	8					8	7		11	11	7
Period 2			11	0				9			0	6	7	11		6	7	8	11	7
Period 3			6	8			7	6	7	8	7	8	6	0	7		9	11		
Period 4	7	11	6			6		6	8	7		7	6	7	7	8	6		11	7
Period 5	8	8	8	7		6	8				8	8	6		9	8	7		8	6
Period 6		8	8	6	8	7	8		6	11	6	7	6	8	6	7	9	8	8	7
Period 7	8	7			8	7	7	7	7	9	8	7	8	7	5	9	7	8	7	11
Period 8	8	8	7			8	7	7	4	8		11			6	8		11		
Period 9	8			11		8	5	8	8	8	8	7	7	8	6	11	7			6
Period 10	6	8	8	7	7	7	9	6	11	7		7	8	7	8		7	7	7	6
Period 11	8	7	8	7	8		8		8	8	7	8	3	8	8	7	7	7	6	0
Period 12	7	7	8	8	8	8	7	7	6	7	8	7	8	7	9		8	8	8	7
Period 13	8	8		8		8	8	7	8	8	8	8	7	7	7	7	11		8	10
Period 14	8	6	7	7	8		8	8	7	7	7	7	9	7	8	7	8			11
Period 15	8	8		8	7			8	7	6	7	7	8	8	8	8	8	7	9	11

4.6. Pairs of Investment Numbers in the Tsukuba B Session (blank means non-participation and boldfaced numbers indicate data of subjects who did spiteful behavior).

Period 1			Period 2			Period 3			Period 4			Period 5			Period 6			Period 7			Period 8		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,6			1,5			1,10	**8**		1,3	6	7	1,16	8	8	1,8			1,12	7	8	1,9	4	8
2,10	8	7	2,8	**9**		2,18	11		2,4		11	2,11	8	8	2,14	8	8	2,3		**7**	2,16	8	8
3,9	**7**		3,7		11	3,17	9	6	5,20	**7**		3,10		**8**	3,13	6	8	4,20	11		3,15	6	7
4,8			4,6		**0**	4,16		**8**	6,19	11	6	4,9		**7**	4,12	7	6	5,19	7	8	4,14		
5,7			9,20	**7**		5,15	**7**		7,18			5,8			5,11	6	8	6,18	8	7	5,13		
11,20	**7**		10,19	11		6,14	**0**		8,17	6	6	6,7	8	6	6,10	11	7	7,17	7	7	6,12	11	8
12,19	11		11,18	8	**0**	7,13	6	7	9,16	8	8	12,20	6	8	7,9	6	8	8,16	9	7	7,11		**7**
13,18	11		12,17	7	6	8,12	8	6	10,15	7	7	13,19	8	6	15,20	7	6	9,15	**5**	7	8,10	8	7
14,17			13,16	6	7	9,11	7	7	11,14	**7**		14,18			16,19	8	7	10,14	7	9	17,20		
15,16	7	8	14,15		11	19,20			12,13	6	7	15,17	7	9	17,18	8	9	11,13	8	8	18,19		11

Period 9			Period 10			Period 11			Period 12			Period 13			Period 14			Period 15		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,11	8	8	1,17	7	6	1,13	3	8	1,18	8	7	1,2	8	8	1,19		**8**	1,4	8	8
2,20	**6**		2,13	8	8	2,5	8	7	2,15	9	7	3,20	**10**		2,17	8	6	2,6		**8**
3,19			3,12	7	8	3,4	7	8	3,14	7	8	4,19	8	8	3,16	7	7	3,5	**7**	
4,18		11	4,11		**7**	6,20	**0**		4,13	8	8	5,18			4,15	8	7	7,20	11	
5,17	**7**		5,10	7	7	7,19	6	8	5,12	**7**	8	6,17	11	8	5,14	**7**	8	8,19	9	8
6,16	11	8	6,9	11	**7**	8,18	**7**		6,11	8	8	7,16	7	8	6,13	**9**		9,18	**7**	7
7,15	6	5	7,8	6	9	9,17	**7**	8	7,10	7	7	8,15	7	7	7,12	7	8	10,17	8	6
8,14	8	8	14,20	6	7	10,16	7	8	8,9	6	**7**	9,14	**7**	8	8,11	7	8	11,16	8	7
9,13	7	8	15,19	7	8	11,15	8	7	16,20	**7**		10,13	7	8	9,10	**7**	7	12,15	8	7
10,12	7	8	16,18	**7**		12,14	8	8	17,19	8	8	11,12	8	8	18,20	11		13,14	8	8

4.7. Payoffs of Each Subject in the Tsukuba B Session

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	706	6526	2210	706	706	706	706	706	4018	7340	2210	2658	2658	706	7340	6526	706	8278	8278	4018
Period 2	706	2523	8278	706	706	706	2658	5907	2210	2658	2386	5681	6339	8278	2658	5681	6339	4904	8278	4018
Period 3	2386	2658	5765	4904	2210	706	6339	5766	6478	4904	6478	7237	5681	706	4018	2386	8209	8278	706	706
Period 4	6339	8278	5681	2658	2210	5504	706	5515	7345	6478	2210	6339	5681	4018	6478	7345	5515	706	10384	4018
Period 5	7345	7345	4904	4018	706	5766	7237	706	2210	2386	7345	7237	5766	706	8271	7345	6481	706	7237	5766
Period 6	706	7345	7237	5681	7237	6114	7237	706	5766	10339	5766	6339	5766	7345	5681	6526	8225	7250	7340	6339
Period 7	7340	4018	2210	2658	7340	6526	6478	6481	6115	8271	7345	6526	7345	6481	4950	8271	6478	7340	6526	8278
Period 8	6751	7345	6339	706	706	6765	4018	6526	4420	7340	2210	10173	706	706	5681	7345	706	8278	2658	706
Period 9	7345	2003	706	8278	2210	6765	4762	7345	7340	7340	7345	6526	6526	7345	5272	10173	4018	2658	706	3244
Period 10	5681	7345	7340	4018	6478	6114	8209	5765	10339	6478	2210	6526	7345	6339	7340	2210	6339	4018	6526	5681
Period 11	6383	6526	7340	6526	7340	706	7237	2210	7340	7340	6526	7345	3831	7345	7340	6526	6526	4018	5766	706
Period 12	6526	6481	7340	7345	7340	7345	6478	6339	5681	6478	7345	6526	7345	6526	8271	2210	7345	7340	7345	4018
Period 13	7345	7345	2615	7345	706	6765	7340	6478	7340	7340	7345	7345	6526	6526	6478	6526	10173	706	7345	7031
Period 14	4904	5766	6478	6526	7340	2523	7340	7340	6478	6478	6526	6526	5907	6526	7340	6478	7237	2658	2386	8278
Period 15	7345	4904	2210	7345	4018	2386	2658	7250	6478	5766	6526	6526	7345	7345	7340	7340	7237	6478	8225	8278

4.8. Record Sheets and Questionnaires for the Tsukuba B Session

ID Number = 1, Female, Earnings = 2568 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I chose participation to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	3980	Because I expected that my opponent would choose a large investment number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected that a high payoff when choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	8	3976	Because I expected that my opponent would choose a large number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get at least 500 by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	6	3400	Because I expected that my opponent would write a number around 10.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected a higher payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	3	2038	Because I expected that my opponent's investment number would be around 7.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected my opponent to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected my opponent to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because my payoff would be higher than 706 by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	If I choose 8, then my opponent's payoff is 4904 and my payoff is 2386. If I choose 11, then my opponent's payoff is 8278 and my payoff is 2658. My payoff changes little, while my opponent's payoff does much.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would certainly be higher than 706 by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because I expected that my opponent would choose a middle investment number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would be higher than 706 with high probability.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a number around 6.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that my opponent would be about to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing non-participation is risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that my opponent would invest around 7 units.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing non-participation is risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	8	6751	Because I expected that my opponent would choose a middle investment number.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because both payoffs would be high if both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a similar investment number.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because both payoffs would be high if both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because I expected that my opponent would choose a middle number.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	8	6383	Because I expected that my opponent would choose an investment number about 8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected that my opponent would choose a similar investment number.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a similar investment number.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected that my opponent would be about to choose participation and an investment number around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it would be more likely to get a high payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected that my opponent would choose a similar investment number.

ID Number = 1, Female, Earnings = 2,568 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

In particular I looked at Table 1 when I decided my investment number. If someone invests 24 units, he loses heavily, while his opponent has a big money. I wonder if such a person exists. Because choosing a large number or a small number is risky, everybody tended to choose about 8.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).
It is desirable that my payoff is as high as possible, while my opponent's payoff is as small as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

When I did not participate in investment, I expected my payoff would be high by my opponent's investment. However, because my opponent had the same idea, we destroyed ourselves. Therefore I tried to avoid non-participation. After all, the payoffs were often high when both participated in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

At early periods I chose the numbers randomly. But my opponents' investment numbers have been almost fixed from a middle. Thus I chose numbers leading to high payoffs for those numbers.

When your opponent did not participate in investment:

I chose the number so that only my opponent did not get a large payoff. For example, if I choose the number maximizing my payoff, then my opponent's payoff is about 8000. On the other hand, if I choose a number (8) so that my payoff is not much different from the maximal payoff, then my opponent's payoff is about 5000. Therefore I chose the latter.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think the best choice would be to participate in investment and invest about 8 units. This is because both I and my opponent receive reasonable payoffs.

ID Number = 2, Male, Earnings = 2852 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected a reasonable payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	Because I thought that my payoff would be large by choosing this number with high probability, taking account of my opponent's investment number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I expected a higher payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my payoff is maximized by choosing this number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my payoff would be larger when my opponent chooses participation, but I do not, comparing with the case in which both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The average payoff is higher by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	3981	There is good probability that my payoff is high by choosing this number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I am afraid that my payoff would be low if my opponent chooses non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my opponent also chose participation, I expected to receive a reasonable payoff safely and could avoid a big loss by choosing around 8.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I am afraid that my payoff is low (706) if both choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9		2523	Because my opponent did not participate in investment, I reduced his payoff to the permissible level.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I attempted to avoid the situation in which both choose non-participation and the payoffs are 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is maximized by choosing this number.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my payoff would be larger when my opponent chooses participation, but I do not, comparing with the case in which both choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to avoid the worst situation (neither of us participates in investment).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because there is high probability that I steadily obtain a reasonable payoff.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be large when I do not participate in investment, but my opponent does. However, when neither of us participates in investment my payoff is small. Therefore, I chose participation to receive a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I could receive a reasonable payoff steadily.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully my opponent participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing participation is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	By choosing this number, I could ensure a reasonable payoff.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		My opponent would not choose a large investment number even if he participates in investment, but I do not. Therefore I expected a large payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I chose the number so that my opponent's payoff was reduced to the extent that the decrease in my payoff is acceptable.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can expect a reasonable payoff and there is high probability that my opponent will participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because both payoffs are large even when I consider my opponent's payoff.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can expect a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because choosing this number is the safest choice.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I can expect a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	Choosing 9 is not safe as doing 8, but my payoff might be higher and the loss would be small.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		With higher probability I can expect a larger payoff by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I can steadily receive a reasonable payoff for any investment number of my opponent.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing this number would maximize my payoff when considering my opponent' behavior.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		From data at the previous periods, there is high probability that my opponent will participate in investment. If this happens, I may receive a large payoff by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

ID Number = 2, Male, Earnings = 2,852 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I often used the payoff tables for the case in which both participate in investment. Considering not only my benefit but also my opponent's behavior carefully, I chose the number maximizing my payoff.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

2. If my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At first glance I thought non-participation might be more beneficial than participation. However, when I did not participate in investment, but my opponent did, the number that my opponent chose was smaller than the number maximizing his payoff. Then my opponent did not lose much, while I lost very much, comparing with the case in which my opponent chooses the number maximizing his payoff. After all, I could receive a higher payoff by participating in investment. Also, I would like to avoid the case in which neither of us participates in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

My opponent did not want to lose in his payoff, either. Considering this point, I tried to maximize my payoff.

When your opponent did not participate in investment:

I prevented my opponent from receiving a large payoff, as long as the reduction of my payoff was permissible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think that the total profit would be larger by participating in investment at all periods, because of the reasons mentioned above.

ID Number =3 , Male, Earnings = 2530 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		When participating in investment, I can control my payoff by choosing an investment number.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	12	7172	Because my opponent would not choose a large number at the first time.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected a higher payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	3491	The same as the above.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	6432	Because my payoff would be large with high probability.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I am sure that my payoff is low when I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	24	24369	I expected that my opponent's investment number would be around 10.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To look at what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Because I did not like that my opponent' payoff was large.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I could ensure at least 7000 payoff by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I did not participate in investment at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	Because I expected that my opponent would invest about 10 units.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to maintain at least 10,000 payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	My opponent's investment number would be small.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my payoffs were only about 6,000 when I chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because choosing this number would ensure a reasonable payoff on average.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I do not like the situation in which neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I considered the balance of my opponent's payoff (and my payoff).

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as period 6.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		To look at what will happen.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.			706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected that my opponent's investment number would be between 6 and 8.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is less risky than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the previous period.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get a reasonable payoff constantly by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected that my opponent would choose 8.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I attempted to avoid the situation in which neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10		2615	I tried to get a large payoff and I also considered my opponent's payoff.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the previous period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected that my opponent would choose 8.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the pervious period. My payoff would be 6000-7000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I made my opponent' payoff not large.

ID Number =3 , Male, Earnings = 2,530 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

My payoff is quite low when my opponent does not participate in investment.
I almost always used Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods, I expected that if I did not participate in investment, my opponent would invest 10 or 11 units to maximize his payoff, and thus my payoff would be 7000 or 8000. However, my actual payoffs were lower than these expected value, because my opponents chose smaller numbers. Or my payoff was 706 because my opponent did not participate in investment, either. Therefore I usually participated in investment at later periods.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose 7 because my payoff would be reasonable on average and my opponent's payoff would not be very high.

When your opponent did not participate in investment:

I chose 7 to make my opponent's payoff small.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

My opponents did not choose large investment numbers, neither did I. This is because they did not like that the payoff of their opponent was higher than their own payoff. Most people invested 7 or 8 units. But by investing 7 or 8 units, I had damage because my opponents did not participate in investment often. I think that investing 7 or 8 units is good when my opponent participates in investment.

ID Number = 4, Male, Earnings = 2291 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	7234	Expecting my opponent would choose 12 or 13.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Expecting many people would choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I did not participate in investment at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	9	4383	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my success at period 1. I did the same thing.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	My payoff is maximized by choosing this number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because my payoff would be 8278 if my opponent participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I tried non-participation one more time.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.		8	4904	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my failures at periods 1-3.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	My payoff is largest by choosing this number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because of my failure in period 4.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because non-participation did not work well.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because I expected that my opponent would choose 8-11.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participation worked better than non-participation did.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is largest by choosing this number.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because non-participation went well at period 9.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent did not choose 11 in the case × O (in which I did not participate in investment, but my opponent does).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because many people chose 7 or 8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

ID Number = 4, Male, Earnings = 2291 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (1) in Practice.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I thought nobody would invest more than 11 units.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods I expected that if I did not participated in investment, then I could receive high payoffs because my opponents would invest 11 units. However my opponents did not do so. Therefore I have participated in investment from a middle.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Because many people chose 7 or 8, I chose a number in an attempt to make my payoff as large as possible for such a number.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. Choose 7 or 8 when the opponent participates in investment, and choose 11 when he does not.

ID Number =5 , Male, Earnings = 1889 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to know what my opponent would do.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	14	8885	I expected that my opponent would invest about 10 units, and chose the investment number maximizing my payoff under that expectation.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to know what my opponent would do one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	10	5688	Because my payoff would be at least 5000 if my opponent invests at least 9 units.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected that my opponent would choose "participation" and wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	2299	Because I expected that my opponent would invest 13 units.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	Because I expected that my opponent would invest 10-13 units.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that my opponent would choose participation, and I wanted to get a reasonable payoff safely at the first period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	I made a wrong estimate.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that my opponent would choose participation this time, and I wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	I made a wrong estimate again.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my failures at the previous two periods. I tried to recover my loss.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent expected that I would invest 11 units. Instead, I reduced my opponent's payoff half by choosing this number.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I wanted to get a reasonable payoff this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent expected that I would invest 11 units. Instead, I reduced my opponent's payoff half by choosing this number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		My opponents at the previous four periods chose "non-participation," and so my opponent at this period would choose "participation."
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff is only 706 if neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I expected that my opponent would invest 10 or 11 units.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I have to participate in investment once more, in order to recover my loss.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that my opponent would invest 9 or 10 units.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because all would feel that participation is more advantageous, I counterplotted their plans.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent expected that I would invest 11 units. Instead, I reduced my opponent's payoff half by choosing this number.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because I expected my opponent would invest 9 or 10 units.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent would invest 9 units.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my payoff would be larger by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because my opponent would invest at most 8 units, I wanted to get a higher payoff than my opponent does.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I wanted to get a little higher payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to avoid the situation in which neither of us participates in investment and the payoff is 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected my opponent would invest 7 or 8 units.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I went on the gamble because this is the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

ID Number =5 , Male, Earnings = 1889 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (3) in Actual Experiment

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I thought none would invest more than 12 units as soon as I looked at Payoff Table 1. Payoff tables 2 and 3 were not necessary for me. I realized that investing 8 units would be best to receive the maximal payoff. By using Payoff Table 1, I considered which investment number maximize my payoff for each investment number of my opponent, and I realized that the best choice is to invest 8 units.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Basically, participation in investment is less risky and safe. However, when I expect my opponent to participate in investment, non-participation in investment is more beneficial theoretically.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I invested 7 units because I expected that my opponent would invest 8 units. By investing 7 units instead of 8 units, my payoff decreases only by 5, while my opponent's payoff decreases by at least 800.

When your opponent did not participate in investment:

Clearly my opponent intended to receive 8278 payoff, expecting that I would invest 11 units. I was angry about it. Therefore, I invested 7 units so that my opponent's payoff was about the half of 8278.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?
(No answer)

ID Number = 6, Male, Earnings = 2158 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I participated in investment to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	14	8	3692	Because I like this number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		As a first step I did not participate in investment to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I participated in investment for a trial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	24	20690	Because my opponent's payoff was larger than mine at practice 1.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to participate in investment and invest 24 units, because this is practice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24	2	500	I invested 24 units to make my opponent happy for a moment and shake him.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because my opponent would participate in investment perhaps.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The payoffs of all subjects would increase by choosing participation, instead of continuing to choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I do not want to lose a game against my opponent. Life is not so easy.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I hate my opponent's attitude. He only considers his own payoff. Think of the payoffs of others.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	6	5504	My opponent would choose around 8, and I sacrificed my payoff by choosing 11.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	This number would be the safest one which minimizes my loss.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	6114	Choosing 11 would be best if the payoffs of all subjects are considered.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected my opponent would choose 6-8.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	Choosing 11 would be best if the payoffs of all subjects are considered.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	6114	I have received reasonable payoffs recently, and so it matters little to me which number should be chosen.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	It would be best to punish my opponent by reducing his payoff even if my payoff also decreases. Life is not so easy. What did my opponent think? I prevented him from receiving a high payoff.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would choose a number around 6-8. I should choose 8 to maximize my payoff.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	Choosing 11 would be best if the payoffs of all subjects are considered.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	9		2523	I chose 9 on sufferance, but I will never choose 11. There are many mean fellows. I feel sick. I will never descend to such meanness.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	8		2386	This is the final period. How silly you are! But I never write 24. Feeling sick.

ID Number = 6, Male, Earnings = 2158 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

It is desirable that the sum of my payoff and my opponent's payoff is as high as possible, unless my opponent is mean.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods I cared only about my payoff and did not participate in investment. But the others did not, either. Because non-participation was not beneficial as a whole, I decided to participate in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I considered the sum of my payoff and my opponent's payoff. Perhaps my opponent would choose around 6, 7, or 8, and so I chose around 11.

When your opponent did not participate in investment:

I invested 0 units so that both payoffs were 706. I was very angry about my opponent because he cared only about his own payoff. But at later periods I invested some units out of pity.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

We should make investment decisions to maximize the sum of my payoff and my opponent's payoff. I am irritated when my opponent considers only his own payoff.

ID Number = 7, Female, Earnings = 2620 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent would not participate in investment to see what happens or he would invest a small amount at the first time.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	12	7	3792	Because my opponent would invest a small amount to look at what would happen.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, but my opponent does, my opponent would definitely choose 13.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	3	9	4039	Because my opponent would invest a relatively large amount.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be limited to some degree if I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	12	7172	My opponent would invest 7-9 units of money, and I chose this number to receive a reasonable payoff safely under that expectation.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	10	5688	Because I expected that my opponent would choose a large investment number as at practice 3.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		If I do not participate in investment, but my opponent does, my opponent would invest 11 units of money to maximize his payoff. (Whether or not my opponent participates in investment is left to chance.)
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I recognized some persons have the similar idea.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I chose the number which maximizes my payoff because I knew my opponent did not participate in investment.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		There is good probability that my opponent would choose non-participation. But I do not like the case in which my payoff is only 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because my opponent would invest a secure number when he participates in investment.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that someone would participate in investment to avoid falling together.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		2658 is better than 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I expected that my opponent would invest 6-9 units.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to have a bet one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I perceived that my opponent might be fool (the opponent at the last period did not choose the number maximizing his own payoff).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	5	4762	I expected that my opponent would choose 7-9.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of the reasons at periods 5 and 9.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	7	7	6478	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I chose the number maximizing my payoff.

ID Number = 7, Female, Earnings = 2620 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

By choosing around 7-9, I can constantly get 6,000-7,000 points if my opponent also takes a safe strategy. There would be little people who invest more than 9 units. All of us would receive similar payoffs if we just understand the rules.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).
   It is desirable that my payoff is high and the difference between my payoff and my opponent's is large.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

If I do not participate in investment, then it is possible that my opponent may not either, and both may get low payoffs. Also, I expected a high payoff in the case ×O (in which I did not participate in investment, but my opponent did). However, in that case, my payoff was not so high, because my opponent thought that if he could make his opponent's payoff as small as possible, it was fine that his payoff was moderate.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I took a safe strategy (chose around 7-9), because of the reason specified in (3).

When your opponent did not participate in investment:

I tried to maximize my own payoff, regardless of my opponent's payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

One should participate in investment if his prime concern is his own payoff. I would like to avoid the case where neither of us participates in investment and both receive low payoffs. Investing more than 9 units would just make my opponent happy, because my payoff is not high, while my opponent's payoff is quite high.

ID Number = 8, Male, Earnings = 2476 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be more beneficial than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	6	3400	Because choosing this number would make less mistake.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be more beneficial than non-participation
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	10	5095	I wanted to try several numbers.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to try several numbers by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24	8	500	I wanted to try several numbers.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Choosing this number is most profitable.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Hopefully my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because there is some probability that my payoff will be large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing this number would be profitable.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Choosing this number would be profitable.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Hopefully my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	I want to get a high payoff.

Period 8 of the Actual Experiment

w	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my opponent would choose a number between 6 and 8.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Hopefully my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	My opponent would choose 6 or 7.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	My opponent would choose 8 or 9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I did not give my opponent a large payoff.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish that my opponent would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I wish that my opponent would choose 8.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing 7 would be most profitable.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Choosing 7 would make little mistake.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	There is some probability that my payoff is large.

ID Number = 8, Male, Earnings = 2476 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

First I thought that the case × O where I did not participate in investment, but my opponent did would be most beneficial to me. In this case, however, my opponents rather reduced my payoff than maximized their own payoffs. Therefore I found that the case O O where both participate in investment was most beneficial to me in a middle of the experiment.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I thought that the case where I did not participate in investment, but my opponent did would be best for me. However, I found that non-participation was not so profitable and very risky in a middle of the experiment, and so I participated in investment at all the rest of periods.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose 6-8, because my payoff was reasonable and my opponent's payoff was not very high.

When your opponent did not participate in investment:

I rather reduced my opponent's payoff than maximized my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It would be best to participate in investment and choose around 6-8 at all periods, because my payoff would be reasonably high and be similar to my opponent's payoff.

ID Number = 9, Male, Earnings = 2955 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is clear that there is a big loss when both choose 'non-participation'.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	Because I expected that my opponent would choose the average investment number (12).

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I took a bleak.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my failure at practice period 2.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		1282	I do not like to write the number 13 simply (to maximize my payoff).

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		'Non-participation' is not a fun. Because this is practice, I would like to have a fun.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	10	4393	I wanted to see what would happen if I choose a wild number before the actual experiment.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Everyone would participate in investment, because there is enough time (ten minutes) to consider. I took a counterplot.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I was revenged for non-participation at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	If I choose the number maximizing my payoff, my opponent's payoff is very large. I am angry about it.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing non-participation is boring in this game.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	My opponent would choose 8-10.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is efficient for me to participate in investment as far as my opponent also does.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Everyone seems to be experienced and so my opponent would choose 6-9.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	If I choose the number maximizing my payoff, my opponent's payoff is very large. I am angry about it.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	My opponent would choose 7 or 8.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	7	6115	To reduce my opponent's payoff.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	4	4420	Choosing this number would result in a reasonable payoff safely (I halt an attack on my opponent).

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	10339	Because it would be most efficient to choose this number as at period 9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Everyone seems to settle down to choosing 7 or 8. Because I will never meet the same person, it is interesting to choose 7 to spite my opponent.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above. Spiting my opponent means reducing his payoff.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

ID Number = 9, Male, Earnings = 2,995 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

Payoff tables 2 and 3 are little meaningful. I almost always the north-west side of Payoff Table 1, because none would choose a large investment number.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).
It is desirable that my opponent's payoff is not larger than my payoff, and my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I intended to give my opponent a metal blow by choosing non-participation. However, I found it meaningless at early periods.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I tried to choose the number that is smaller than my opponent's number by 1. This is because my payoff is larger than my opponent's by doing so.

When your opponent did not participate in investment:

My opponent tended to receive a high payoff. I tried to reduce my opponent's payoff as far as my payoff did not decrease much.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Non-participation in investment often results in a loss, because my opponent may not participate in investment, or my opponent can control my payoff when he participates in investment. Concerning investment numbers, it is important to balance my investment number and my opponent's.

ID Number = 10, Male, Earnings = 3199 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	Because by choosing this number, I would surely receive a reasonable payoff.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		1148	I did not like that my opponent got a large payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	13	7844	From my experience at practice 1. Then I got a large payoff.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to choose 'non-participation' once at least.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I failed by choosing non-participation at practice 4.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that my opponent would choose a similar number.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because of my success at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because choosing this number maximizes my payoff.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		At period 2 my opponent did not participate in investment and I felt mortified.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected that my opponent would choose around 8.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I will not choose 0 if my opponent does not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	Not in particular.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is significant to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	10339	Not in particular.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	7 is a lucky number.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment from now on.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I will continue to choose 7.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I like to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I like the number 7.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be profitable to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing 7 would be reasonable.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected that my opponent would choose about 7.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I like to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because my opponent would choose 6-9.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent would also participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	7	8	7340	Because my opponent would choose around 7.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Investment Number	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.	8	6	5766	I found choosing 8 would be better than choosing 7.

ID Number = 10, Male, Earnings = 3199 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

Not in particular.
I used Payoff Table 1 when both I and my opponent participated in investment. I used both Payoff Table 2 and Payoff Table 3, when my opponent participated in investment, but I did.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Participation would be good both for me and for my opponent (if my opponent also participates in investment).

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I always chose 7. But I think I could receive higher payoffs by choosing 8 instead of 7.

When your opponent did not participate in investment:

At the first time I chose the number maximizing my payoff. At the second time I chose a smaller number so that my opponent did not get a high payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think that I should care only about my payoff and always invest 8 units. Also, non-participation should not be chosen, because it makes my opponent feel uncomfortable and I may not receive a high payoff.

ID Number = 11, Male, Earnings = 2633 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I did not participate in investment because everyone would participate in investment at the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number		6	1416	

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Something tells me that non-participation would be more profitable than participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	1815	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I feel non-participation would make both worse-off.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	3918	Because my opponent's investment number would be small.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	3915	Because I expected that my opponent's investment number would be 6-8.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Non-participation is never profitable. My opponent would participate in investment if he is not silly.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	This person, No. 20, did not understand the situation at all even after 4 periods of practice. Choosing '7' will teach him a good lesson.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	0	2386	I found that choosing '8' would be most profitable to the average investment numbers of my opponents, 6-8, over 4 periods of practice.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The case O O is better than the case × O. Clearly, if both invest 6-8 units, both receive reasonable payoffs and can avoid big losses.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing this number is safe.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Why did not my opponent participate in investment? Someone might not participate in investment at the latter periods with psychological warfare. But this is still the begging of the game. Why did not he choose a profitable action? You should make a profit rather than enjoy yourself. Did you understand it?

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The case × O is more profitable than the case × O, but the case O O is most profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Choosing this number is safe and most reasonable. If both of us choose 7 or 8 without any serious consideration, we can get good profits with less effort.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	No other choice.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	(8, 8) would be settled.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	If you invest 0, your opponent does not more than 8. I cannot see why my opponent did not understand it.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	No outcome other than (8, 8) will occur.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Why are you so silly, No. 4? Think about the meaning of investment. The average investment number in the market has already been known.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The person who does not participate in investment must be foolish. Why should I participate in investment? Because I can increase my own money.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	If my opponent invest in an attempt to maximize his profit, he should write 8 because the average investment number is 8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Invest. Num.
Invest. Num.	8	7	6526	The same as the above.

ID Number = 11, Male, Earnings = 2633 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used only Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

The case O O (where both I and my opponent participate in investment) is more beneficial to both me and my opponent than the case O× (in which I participate in investment, but my opponent does not) and the case ×O (in which my opponent participates in investment, but I do not). This is clear from the fact that the average investment number is around 6-8. It is hard to find the reason why non-participation is more advantageous than participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

The average investment number was around 6-8. Thus I almost always chose 8 so that both my payoff and my opponent's payoff were high.

When your opponent did not participate in investment:

I chose 7 to receive a moderate payoff. I also intended my opponent to realize the disadvantage of non-participation.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

First of all, the purpose of investment is to increase my own property. It is not desirable to compete with others and trip others up because it may lead to my own loss. It is good to participate in investment positively in order to capture the state of the market. By investing 8 units, my payoff is highest for the average investment number 6-8. If my opponent also realizes this fact, both of us receive high payoffs.

ID Number = 12, Male, Earnings = 3284 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to see how my opponent behaves when I participate in investment (because this is practice).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest.Num.	7	10	5688	From the payoff tables, I would get a reasonable payoff on average by investing this amount.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I would like to see how my opponent behaves when I do not participate in investment. (Perhaps he would choose 13.)
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	To prevent my opponent from getting a large payoff.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		1148	To prevent my opponent from getting a large payoff.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Choosing this number maximizes my payoff.

Period 2 of the Actual Experiment

w	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is not fun to choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because my payoff would be high on average by choosing this number.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent's payoff is surely small if I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because my payoff would be high on average.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my payoff as well as my payoff would be high on average.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, my opponent's payoff is small. Also I risk my payoff because the case × × might happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Both I and my opponent would receive high payoffs on average. (Choosing 8 is better than choosing 6 or 7 if my opponent chooses 6, 7, or 8.)

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

ID Number = 12, Male, Earnings = 3284 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I always used Payoff Table 1 to make decisions.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Non-participation always makes my opponent's payoff low.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Basically I chose 8.

When your opponent did not participate in investment:

I chose 11 to maximize my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

By Payoff Table 1, I found my best investment number for each investment number of my opponent (11 for 0, 11 for 1, ..., 8 for 8, ..., 0 for 24). When both I and my opponent choose 8, I choose my best number for the number he chooses, and my opponent also chooses his best number for the number I choose. This situation would be less risky for both. Therefore I think choosing 8 is the best choice.

ID Number = 13, Male, Earnings = 2798 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I tried participation because this is practice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	12	7206	By looking at the supplemental tables 1-2, I thought there is high probability that choosing this number will make my payoff high.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get used to this experiment. The same as period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	4	2708	I expected that everyone would reduce his investment number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be disadvantageous to declare non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	10	5596	My opponent would choose a number between 3 and 10.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		To look at what happens.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I would get 8000 if I do not participate in investment, but such an action is risky at the first time. I want to try non-participation after accumulating enough payoffs.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	The only thing I can do is to choose 11 to receive the highest payoff.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I had better looking at how my opponent behaves.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I am happy if my opponent chooses 8 or 9. I hope so.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Investing nothing (non-participation) is not a good choice at this stage. I will do it only after my payoff per period has been constantly at least 5000 (my goal is to get at least 5000 points per period).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	My opponent would choose a number between 5 and 11. Choosing 7 is safe both when my opponent's number is 5 and when it is 11.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I continue to participate in investment until my payoff per period has been constantly at least 5000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing this number would be best if my opponent chooses a number between 6 and 8. I can get 5000 points even if he chooses 5.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		At previous three periods, my opponents chose participation and invested 6 units. My opponent at this period would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I get 8278 points in the case 0-11 and 7345 points in the case 8-8. I prefer the latter to the former.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Choosing 8 is good if my opponent chooses a number between 6 and 9.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		If my opponent is a normal person, he would invest 11 units, and my payoff would be 8278 points.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get reasonable payoffs constantly.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	My opponent would choose a number between 6 and 8.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	3	3831	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Safety is important for me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, my payoff would be either 706 or 8278. The gap between them is too large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble. Everyone would not participate in investment at the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		There is high probability that my opponent will choose non-participation (×).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	My opponent would choose a number between 6 and 8.

ID Number = 13, Male, Earnings = 2798 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I think only Payoff Table 1 is sufficient.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment only if I went a gamble to get a high payoff.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

My opponents almost always selected 6-8 only. Thus I always selected 8 to receive a high payoff for such numbers.

When your opponent did not participate in investment:

I invested 11 units so that my payoff is as high as possible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

(1) Never participate in investment and get 8278 points at several periods.

Or

(2) Invest 8 units at all periods.

ID Number = 14, Female, Earnings = 2538 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I participated in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	As a first step I chose a middle number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	3	2272	I expected that my opponent would invest at least 10 units.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	3610	I expected that my opponent would invest at least 10 units.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My expectation proved wrong, but it is interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	10	4769	I expected that my opponent would invest at least 7 units.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	I expected that my opponent would invest at least 6 units.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected that my opponent would participate in investment and invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected that my opponent would invest at least 6 units.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest at least 6 units.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest at least 6 units.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest at least 6 units.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that my opponent would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected that my opponent would invest at least 6 units.

ID Number = 14, Female, Earnings = 2538 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 1 and Supplemental Payoff Table 1-2.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment at early periods. It was interesting to see the various responses of my opponents when I chose non-participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose 6-9, because both my payoff and my opponent's payoff were reasonably high.

When your opponent did not participate in investment:

I chose 11, because I got the highest payoff. I expected my opponent would also choose 11 when I did not participate in investment, but my opponent did. However, this expectation did not come true.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

The best choice would be to participate in investment and choose an investment number so that both I and my opponent get reasonably high payoffs. This is because it was difficult to expect my opponent's investment number when I did not participate in investment.

ID Number =15, Male, Earnings = 3118 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I thought my payoff would be higher by choosing participation than by doing non-participation when looking at payoff tables.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	5000	I expected that my opponent would choose 7 or 8. I expected from the payoff tables that choosing this number would be most beneficial under that expectation.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		From my success in practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because choosing this number maximizes my payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be higher by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	0	1282	Because choosing this number would be most beneficial under the expectation that my opponent would choose 7 or 8.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I thought it is interesting to choose non-participation by observing the results at practice 2 and 3.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		First of all, I will participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent to choose an investment number between 7 and 9.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because my payoff would be higher by choosing participation than by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because choosing this number maximizes my payoff.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my failure at period 2 of the actual experiment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the result at period 3 was not good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because I expected my opponent to choose an investment number between 7 and 9.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would be better by participating in investment than by not participating.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	I expected my opponent to choose an investment number between 7 and 9.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	5	4950	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	6	5272	Because I expected my opponent to choose around 6.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent to choose a number between 7 and 9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

ID Number =15, Male, Earnings = 3118 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I mainly took a look at Payoff Table 1 when I decided my investment number. I sometimes used Payoff Table 3.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Before the actual experiment, I decided to choose non-participation only one time.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I selected a number between 7 and 9, because I expected my opponent would select a number between 7 and 9 by looking at Payoff Table 1.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think it is best to participate in investment at all periods, because my payoff with non-participation would be smaller than that with participation. Further I think the best investment number is 7, because my opponent would also choose a number between 7 and 9 many times.

ID Number = 16, Male, Earnings = 3065 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		As a first step I participated in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	My opponent would invest about half of 24 units. Under this expectation, my payoff is large by investing about 9 units.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I attempted to get a large payoff in the case where both participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	3981	I chose a number close to half of 24 and wanted to look at what would happen.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I would like to avoid the risk that nether participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	To maximize my payoff in the case O ×.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully my opponent would participate in investment and I would get a large payoff by not participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	1815	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be best that both participate in investment and get reasonable payoffs each other.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	My opponent would choose around 10. Under that expectation, I would receive a reasonably high payoff by choosing this number.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Both my opponent and I would like to avoid the risky case (××) where neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I chose a relatively small number to get a reasonably high payoff even when my opponent chose the same strategy.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	I did not permit only my opponent to enjoy a high payoff. So I chose 8 to reduce his payoff, although my payoff also decreases.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected my opponent to choose 7 or 8.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to avoid the risk that neither of us participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected my opponent to invest 7 or 8 units.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest 7 or 8 units as I did, and he would take a safe action, but not went on the gamble.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	My opponent would expect me to invest 11 units. But I prevent him from getting a high payoff.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would take an action similar to mine.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	The same as period 10.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected that my opponent would invest around 7, 8, or 9 units as I did.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

ID Number = 16, Male, Earnings = 3065 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The payoff changes variously, depending on my investment number as well as my opponent's.
I referred to Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

There is a heavy loss if neither of us participates in investment. Rather it would be better to participate in investment at all periods and get reasonable payoffs steadily.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected my opponent would also do behavior similar to mine, and I chose a number so that both of us got reasonably high payoffs.

When your opponent did not participate in investment:

I lose heavily if my opponent does not participate in investment. If I try to maximize my own payoff, I play right into my opponent's hands and he gets a high payoff. Therefore I reduced my investment number so that the decrease in my payoff was smaller than the decrease in my opponent's payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is good to participate in investment as many times as possible in order to cooperate with my opponent. I should try to enlarge mutual benefit, not my own payoff only. If both of us choose investment numbers such that our payoffs are close, we will reach an agreement and there will be no battle.

ID Number = 17, Male, Earnings = 3021 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		First of all I tried participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	8	4213	Because I expected that nobody would invest a large amount.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I wanted to try participation one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my opponent did not participate in investment.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Non-participation would be more profitable than participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It is more fun to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	4368	Because investing this amount would be most profitable on average.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected that everybody would participate in investment at the first period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I felt that my opponent would participate in investment and invest a large amount.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because I felt that my opponent would invest a large amount.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be efficient.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	Because I felt my opponent would invest a large amount.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment for a while.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Because investing this amount is efficient.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment for a while.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	Because I expected my opponent to invest a small amount.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will participate in investment a little longer.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	Because my opponent would invest around 6 or 7 units.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I still participated in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	7	7	6478	My opponent would invest a relatively large amount.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I challenged non-participation although it was risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I am obstinate.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I finally recognized that non-participation would not pay me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected my opponent to invest a large amount.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Wishing I can get a high payoff this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because most of my opponents have invested around 6 or 7 units.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because 'non-participation' is too risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because most of my opponents have invested around 6 or 7 units.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be risky if I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	Because I wanted a high payoff.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is safer than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Hopefully my opponent would invest a large amount.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Off course I participated in investment because this is the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Hopefully my opponent would invest a large amount again.

ID Number = 17, Male, Earnings = 3021 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I took a look at Payoff Table 1 only.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment a few times, because I could receive a high payoff if I did not participate in investment, but my opponent did.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected my opponent's investment number, and then I chose the investment number maximizing my payoff for that expected number.

When your opponent did not participate in investment:

I chose a number so as to make my payoff as high as possible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

The best choice: 6-8
The reason: Because everyone usually invests around 6-8 units, my payoff may become small if I invest larger units or smaller units.

The risk for non-participation is so high that everybody will participate in investment at later periods. In addition, it would be better to submit a participation card and an investment card simultaneously.

ID Number = 18, Male, Earnings = 2430 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	3981	Choosing this number is profitable when my opponent's investment number is small.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff at the previous period was bad.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	4850	My opponent's payoff is at most 3520 when I choose this number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I choose non-participation at this first stage, I meet the wish of my opponent.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	8	2299	I always get a payoff which is better than my opponent's.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	I do not like to receive a payoff which is smaller than my opponent's.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		If my opponent chooses participation (O), it is most profitable for him to invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case in which neither of us participates in investment (××).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	8	4904	I always get a payoff which is higher than my opponent's.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		This would be a safe policy!?
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case ×× (where neither of us participates in investment).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	Choosing this number would be profitable.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Choosing this number maximizes my payoff.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Choosing this number is profitable.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		This is a gamble.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Choosing this number maximizes my payoff.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Choosing this number is profitable.

ID Number = 18, Male, Earnings = 2430 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I mainly used Payoff Tables 1, 2, and 3. Before the actual experiment started, I spend ten minutes to write data of the payoff tables into Supplemental Payoff Tables 2. I never used Supplemental Tables 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

When my opponent participated in investment, but I did not, my opponent almost always chose the number maximizing his payoff and I also received a good payoff.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected that my opponent would choose 6-9. I chose around 7-8 to get a good payoff for such numbers.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

The opponent's payoff should be also considered in selecting an investment number. If I behave selfishly, I might get a large payoff, but might lose a lot. All of us become happy if everyone considers both his own payoff and his opponent's payoff when making an investment decision (this is an ideal).

ID Number = 19, Male, Earnings = 2961 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the case in which neither of us participates in investment and our payoffs are quite low (500).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		1007	By choosing this number, my payoff is not low and my opponent's payoff is not large.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Choosing non-participation is profitable with probability 3/4.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff would be higher than at practice 2.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	3266	I am selfish and my payoff would be largest by investing this amount.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I practice the same thing as at the previous period once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	2	2038	I expected my opponent's investment number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I had a big bet at the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I again tried non-participation because I got savings at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The third of the payoff obtained at the previous period is compared with the payoff obtained when both participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I safely participated in investment this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	11	10384	Choosing this number would be safest, comparing with the case in which both payoffs are 706.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		This is a safe choice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Choosing a middle number would be profitable as at period 4 of the actual experiment.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the number of my opponents who did not participate in investment decreases.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I expected my opponent to choose 6, 7, or 8.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My opponent would choose non-participation (×) if he is very greedy.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		If both participate in investment, I do not hurt my opponent, nor does my opponent.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I narrowly escaped from receiving 706.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I was angry that my opponent did not participate in investment at period 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I settled down now. I would like to avoid that my payoff is 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Choosing 8 is safest and it maximizes my payoff when my opponent's number is between 6 and 8.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is a safe strategy. Most people would have the bad experiences that their payoffs are 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everyone seems to understand that participation is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	To punish the person who seeks only his own interest.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	The same as the above. Everyone looks like understanding the situation.

ID Number = 19, Male, Earnings = 2961 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I took a look at Payoff Table 1. I found the number maximizing my payoff for each of my opponents' investment numbers. I realized from a middle of the experiment that I could get the almost largest payoff by investing 8 units. After knowing a knack about investment, I did not need to consider investment numbers carefully.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At the first three periods, I went on the gamble that I did not participated in investment so as to get a large payoff. However I realized that we could prevent a big loss when both of us safely participated in investment and invested 8 units, and so I decided to participate in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:
8: My payoff is maximized by choosing 8 when my opponent invests 6-8 units.

When your opponent did not participate in investment:
11: My payoff is maximized by choosing 11.
8: The decrease of my payoff is relatively small, while the decrease of my opponent's payoff is relatively large.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

If everybody participate in investment and choose 8, none would suffer a large loss. I understood that taking selfish behavior would lead to a serious problem. I am very happy to participate in the experiment.

ID Number = 20, Male, Earnings = 2346 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be safest to participate in investment and invest around 12 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	My opponent would also seek a reasonable payoff steadily.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation would be profitable with high probability.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	5	2942	Choosing this number would result in a reasonable payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	10	5596	By choosing this number, my payoff would not be bad even when my opponent's investment number is small.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		My opponent would invest 13 units if I do not participate in investment, but my opponent does.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		My opponent would participate in investment at the first time. If so, he would invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I do not understand why my opponent at period 1 invested 7 units. But I tried non-participation once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	The same as the above.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I do not understand why my opponents invested 7 units. I tried participation this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	My opponent would choose 7, 8, or 9.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Investment Number	6	7	6339	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		If my opponent participates in investment, but I do not, I can only imagine that my opponent would invest 11 units. So I tried non-participation, expecting that my opponent would choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Perhaps most of my opponents at the previous periods did not understand the payoff tables. I did not participate in investment, expecting that my opponent would invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	It cannot be helped.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully my opponent would invest 11 units.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Why? My plan did not work well. I participated in investment to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I had a bet once more. It is not meaningful to seek the safety at this stage.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I do not understand why my opponent chose 0. I had a bet once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Not in particular.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		10	7031	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Choosing 10 is mysterious. Anyway my strategy worked well and so I tried non-participation again.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I decided no to participate in investment. If my opponent do not participate in investment, either, I will simply give up.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

ID Number = 20, Male, Earnings = 2346 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I almost always used Payoff Table 1 only.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

As a matter of fact I planned to choose non-participation at all periods. However I changed my mind, because I could not have things my own way many times.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Because my opponent always invested around 5-9 units, I continued to invest such units.

When your opponent did not participate in investment:

It did not occur.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

If you want to get a high payoff, do not participate in investment and let your opponent invest 11 units to earn 8278 per period (if you opponent do not participate in investment, give up). If you are satisfied with getting a normal payoff, it would be best to invest 7-9 units continuously.

5. Data for the Tokyo Session B (with the "Opponent" Wording)

5.1. Pairs of Subjects (ID Numbers) in the Tokyo B Session: the Same as the Tsukuba A Session (see Table 3.1.).

5.2. Participation Decisions of Each Subject in the Tokyo B Session: 1 = Participate, O = Not Participate

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	1	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	0	1	1	1
Period 2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
Period 3	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1
Period 4	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0	0	1	1	1
Period 5	1	1	1	1	0	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1
Period 6	1	1	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1
Period 7	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1
Period 8	1	1	0	1	1	0	1	1	1	0	1	0	1	0	1	0	1	1	0	1
Period 9	1	1	1	1	1	0	1	0	1	0	1	0	0	1	1	1	1	1	1	1
Period 10	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
Period 11	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1
Period 12	1	1	1	1	1	0	1	1	0	1	1	0	0	1	1	1	1	1	1	1
Period 13	1	1	1	1	1	1	0	1	0	1	1	0	0	1	1	1	1	1	1	1
Period 14	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1
Period 15	1	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	1	1	1	1

5.3. Participation Decisions of Each Subject's Opponents in the Tokyo B Session: 1 = Participate, O = Not Participate

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1
Period 2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
Period 3	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 4	1	1	1	1	1	1	1	0	0	1	1	1	0	0	1	1	1	1	1	1
Period 5	1	0	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	0
Period 6	1	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1
Period 7	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1
Period 8	1	0	1	0	1	0	1	0	1	1	1	0	1	1	0	1	1	0	1	1
Period 9	1	1	1	1	1	1	1	1	0	0	1	0	1	0	1	0	1	1	1	1
Period 10	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 11	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0
Period 12	1	1	1	0	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1
Period 13	1	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1
Period 14	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1
Period 15	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1

5.4. Investment Numbers of Each Subject in the Tokyo B Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	13	2		7	6	7	7	7	6		6	8		4	6	4		0	7	6
Period 2	9	7	9	7	5	7	5	7	9	7	7	6		10	7	11	6	0	6	6
Period 3	11	7	6	7	6	6	11	7	4		7	9		3	7	4	8	0	8	6
Period 4	9	7	8	9	5	8	8	6	6	8			11	4	5			3	8	6
Period 5	8	2	6	7		11		6	4	9			11	10	6	6	6	2		11
Period 6	8	7	11	7	5		8	7	9		8	9		12	7	7	6	2	8	6
Period 7	8	7	7	7	6			7	8		9	9	6	4	8	7	0	0	8	6
Period 8	7	2		1	5		10	6	8		9		6		9		1	0		6
Period 9	8	7	6	7	6		7		6		11			0	7	3	6	3	8	6
Period 10	6	7	11	7	5	7	8	7	8	0	10		7	10	8	7	6	3	8	6
Period 11	8	7	8	7	6			7	8	0	10		7	0	8	7	6	3	10	11
Period 12	8	7	8	0	11		8	8		3	4			4	6	7	6	3	8	6
Period 13	10	6	8	7	5	8		8		11	6			0	7	2	6	2	8	6
Period 14	8	6	8	7	6	11	1	8		11	9			8	7	7	8	8	8	6
Period 15	8	2	8	7	5		4			9	8		7	6	9	7	8	11	8	6

5.5. Investment numbers of Each Subject's Opponents in the Tokyo B Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	7		6	7	7	13	6	7		2	6	7	0		4	6	4		8	6
Period 2	5	7	5	7	9	7	9	7	6	6	0	6	11	7	10		6	7	7	9
Period 3		0	8	4	7	3		9	7	11	4	7	11	6	6	7	6	7	6	8
Period 4	8	9	9	7	6	8	3			5	4	11			8	6	6	8	8	5
Period 5	6		9	4	6		11		7	6	2	11		2	6	8	6	10	11	
Period 6	7	12		9	8		9	8	8		5	7	11	7	6	8	2	6	7	7
Period 7	9	7	7	6	8	0	0	7	8	4	6	8	9		8	7			6	7
Period 8	8		9		6		9		7	6	10		5	1		2	6		0	1
Period 9	11	6	8	3	6	3	7	0			8		6		7		6	7	6	7
Period 10	6	7		10	0	8	7	8	7	5	7	11	7	6	8	3	6	7	8	10
Period 11	7	6	7	8	7	11	10	3	6	7	8	0	8		10	0	8	7		
Period 12	3	6	4			4	3		8	8		11	0	8	7	6	8	8	6	7
Period 13	6	10	6	8	2	6	2	7	0			6	11		8		8	5	7	8
Period 14	8	8	7	7	8			9	11		8	1	11	6	7	8	6	6	8	8
Period 15	7		5	8	8	2	6	8	11	8	7	9	6	7		8	9			4

5.6. Pairs of Investment Numbers in the Tokyo B Session (blank means non-participation and boldfaced numbers indicate data of subjects who did spiteful behavior).

Period 1			Period 2			Period 3			Period 4			Period 5			Period 6			Period 7			Period 8		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,6	13	7	1,5	9	5	1,10	11		1,3	9	8	1,16	8	6	1,8	8	7	1,12	8	9	1,9	7	8
2,10	**2**		2,8	7	7	2,18	7	0	2,4	7	9	2,11	**2**		2,14	7	12	2,3	7	7	2,16	**2**	
3,9		**6**	3,7	9	5	3,17	6	8	5,20	5	6	3,10	6	9	3,13	11		4,20	7	6	3,15		**9**
4,8	7	7	4,6	7	7	4,16	7	4	6,19	8	8	4,9	7	4	4,12	7	9	5,19	6	8	4,14	**1**	
5,7	6	7	9,20	9	6	5,15	6	7	7,18	8	3	5,8		**6**	5,11	5	8	6,18		0	5,13	5	6
11,20	6	6	10,19	7	6	6,14	6	3	8,17	**6**		6,7	11		6,10			7,17		**0**	6,12		
12,19	8	7	11,18	7	0	7,13	11		9,16	**6**		12,20		11	7,9	8	9	8,16	7	7	7,11	10	9
13,18		0	12,17	6	6	8,12	7	9	10,15	8	5	13,19	11		15,20	7	6	9,15	8	8	8,10	**6**	
14,17	**4**		13,16		11	9,11	4	7	11,14		**4**	14,18	10	2	16,19	7	8	10,14		**4**	17,20	1	6
15,16	6	4	14,15	10	7	19,20	8	6	12,13		11	15,17	6	6	17,18	6	2	11,13	9	6	18,19	0	

Period 9			Period 10			Period 11			Period 12			Period 13			Period 14			Period 15		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,11	8	11	1,17	6	6	1,13	8	7	1,18	8	3	1,2	10	6	1,19	8	8	1,4	8	7
2,20	7	6	2,13	7	7	2,5	7	6	2,15	7	6	3,20	8	6	2,17	6	8	2,6	**2**	
3,19	6	8	3,12	11		3,4	8	7	3,14	8	4	4,19	7	8	3,16	8	7	3,5	8	5
4,18	7	3	4,11	7	10	6,20		11	4,13	**0**		5,18	5	2	4,15	7	7	7,20	4	6
5,17	6	6	5,10	5	0	7,19		**10**	5,12	11		6,17	8	6	5,14	6	8	8,19		**8**
6,16		**3**	6,9	7	8	8,18	7	3	6,11		**4**	7,16		**2**	6,13	11		9,18		11
7,15	7	7	7,8	8	7	9,17	8	6	7,10	8	3	8,15	8	7	7,12	**1**		10,17	9	8
8,14		**0**	14,20	10	6	10,16	0	7	8,9	**8**		9,14		**0**	8,11	8	9	11,16	8	7
9,13	**6**		15,19	8	8	11,15	10	8	16,20	7	6	10,13	11		9,10		11	12,15		**9**
10,12			16,18	7	3	12,14		**0**	17,19	6	8	11,12	**6**		18,20	8	6	13,14	7	6

5.7. Payoffs of Each Subject in the Tokyo B Session

ID#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	5406	1072	3244	6478	6339	12694	5681	6478	2003	1186	5515	6526	706	1536	4078	4960	2017	706	7340	5515
Period 2	5101	6478	5101	6478	8043	6478	8043	6478	5765	5681	2210	5515	8278	6343	9270	2658	5515	4018	6339	8209
Period 3	2658	2210	7237	4281	6339	3463	2658	8271	5812	8278	4281	6481	8278	4590	5681	5812	5766	4018	5766	7237
Period 4	7250	8271	8225	6481	5272	7345	3831	2003	2003	5064	2017	8278	2658	1536	7038	3244	3244	6383	7345	4762
Period 5	5766	1072	8209	4281	3244	2658	8278	2003	5812	5765	1186	8278	2658	3465	5515	7237	5515	8130	8278	2658
Period 6	6526	11480	2658	8271	7038	706	8225	7340	7250	706	5064	6481	8278	5800	5681	7340	2913	4171	6526	6339
Period 7	8225	6478	6478	5681	7237	706	706	6478	7345	2017	5765	7250	8209	1536	7345	6478	706	706	5766	6339
Period 8	7340	1072	5907	871	5272	706	7816	2003	6526	3244	8951	706	4762	905	2523	1186	3718	706	706	2427
Period 9	10173	5681	7237	3675	5515	1554	6478	706	2003	706	6765	706	3244	706	6478	1297	5515	5440	5766	6339
Period 10	5515	6478	2658	9270	1775	7340	6526	7340	6526	2578	6343	8278	6478	5677	7345	3675	5515	5440	7345	9257
Period 11	6526	5681	6526	7340	6339	8278	7031	3675	5766	4018	7056	706	7340	706	9168	2210	7237	5440	2615	2658
Period 12	3831	5681	4420	706	2658	2017	3831	2386	4904	6383	1536	8278	706	6751	6339	5681	7237	6383	5766	6339
Period 13	5677	9257	5766	7340	2658	5766	1186	6526	706	2658	2003	3244	8278	706	7340	1072	7237	3432	6526	7237
Period 14	7345	7237	6526	6478	7237	2658	871	8225	8278	2658	7250	905	8278	5766	6478	7340	5766	5766	7345	7237
Period 15	6526	1072	5064	7340	7038	1186	4960	4904	8278	7250	6526	5907	5681	6339	2523	7340	8225	2658	2386	4078

4.8. Record Sheets and Questionnaires for Tokyo Session B

ID Number = 1, Male, Earnings = 3,098 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everyone would choose participation to look at what would happen at the beginning of the game. I would like to make the game exciting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	3980	Anyway I will invest all units at four practice periods and divide 24 units at the remaining three periods. I chose 9 units rather than 8 units because my payoff would be larger (perhaps my opponent would choose 8).

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Investment numbers might be constant although payoffs are large. However, all people would choose participation at four practice periods. So I chose non-participation this time to play the game with them till the last.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		If all people, including me, use all units of money at four practice periods, then all people would select participation at practice 1 and practice 4, and choose either participation or non-participation at practice 2 and 3. I think this is an interesting (and enjoyable) way to play the game.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		637	I do not intend to make the market flat, but I wish to spend a lot of money at the last time. I can invest 3 units only today.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is the last time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	10	5143	Wait a minute. I have misunderstood the rule of the game. 24 units at each period? I blew it.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I carefully read the rule of the game this time. I expected that everyone would participate in investment, and so I do the same thing.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	7	5406	My management policy is "both I and you get high payoffs". I will always choose 13.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is a safe policy.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	5	5101	Choosing 9 is one of the most profitable numbers if my opponent invests 7 units.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O	× ↓		Anyway "participation". I should not choose non-participation until I win the confidence.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	11 is the number which maximizes my payoff. My opponent gets 10,000 points. There is no problem.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I cannot imagine non-participation. Participation serves for the public benefit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	I hope that larger investment numbers will be traded in the market. 9 is the most profitable number when my opponent invests 5.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The game is becoming interesting. My average payoff is about 5,000 points.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	8 is the most profitable number when my opponent invests 8.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I can get 5,000 points surely (by participation), and so I do not choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	8 is the most profitable number when my opponent invests 6.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation will be profitable definitely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	8 is the most profitable number when my opponent invests 7.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I participated in investment, but can I get a large payoff next time?
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	7 is the most profitable number when my opponent invests 9.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O	O		Again I will get a large payoff (by participation).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	8 is the most profitable number when my opponent invests 8.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Is the current situation a boom?
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	6 is the most profitable number when my opponent invests 11.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I participated in investment, but I feel that the bubble burst suddenly. If the same situation happens at next period, I might choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	8 is the most profitable number when my opponent invests 6.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at period 7 of the actual experiment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	3	3831	8 is the most profitable number when my opponent invests 8.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I have never considered non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	6	5677	10 is the most profitable number when my opponent invests 3.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I intend to participate in investment till the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	8 is the most profitable number when my opponent invests 6.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I can choose non-participation, but the market is still inactive.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	8 is the most profitable number when my opponent invests 8.

ID Number = 1, Male, Earnings = 3,098 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (1) in Actual Experiment

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used the red table most often. I know that I get 30,000 points if I do not participate in investment and my opponent invests 24, but this would never happen. Because there is no data except the payoff tables, everyone would have the same answers. So the key to win this game would be to get reasonable payoffs safely by investing 8 units. A precept: respect the market.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Non-participation is an action that requires my opponent to trust me. Because I receive a high payoff if my opponent invests 24, even though I do not participate in investment. However, such an action is meaningless when everyone faces the same condition.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose the number maximizing my payoff if my opponent chose the investment number that was estimated based on the data of my opponents' investment numbers at the previous periods.

When your opponent did not participate in investment:

I chose the number maximizing my payoff, and did not care about my opponent's payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. By choosing participation we can receive 5,000 points of payoff. Get reasonable payoffs safely. Do not try to get a large payoff. Learn that you always experience a counteraction after getting a large payoff. Do not try to move the market. Follow the market trend. Even when you lose, let the opponent receive a high payoff. Minimize your loss and recover the loss in the long run. Do not pursue the desired number. Decide an investment number based on your current situation.

ID Number = 2, Male, Earnings = 2,614 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is surely positive.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	3491	My opponent would not choose 14 or more because his payoff is small. By investing 7-9, I could get a reasonable payoff on average if my opponent chooses 13 or less.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	**4**		743	Because my opponent did not participate in investment, I attempted to restrain my opponent from receiving a large payoff and make my payoff not small.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	**4**		743	The same as the above.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	3	1195	The same as the reason specified at practice 1.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participation is surely positive.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	**2**		1072	Because my opponent did not participate in investment, I attempted to restrain my opponent from getting a large payoff and make my payoff not small.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	My opponent would not choose 14 or more because his payoff is small. However he might select a little smaller number to beat me next time. Thus I chose this number.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	,O	2210	The same as the reason specified at Period 2.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the reason specified at Period 2.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	**2**		1072	The same as the reason specified at Period 1.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	11480	The same as the reason specified at Period 2.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the reason specified at Period 2.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	**2**		1072	The same as the reason specified at Period 1.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the reason specified at Period 2.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the reason specified at Period 2.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the reason specified at Period 2.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the reason specified at Period 2.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	10	9257	From the past experiences, I think that choosing 6 is better than choosing 7 when comparing my opponent's payoff with my payoff.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the reason specified at Period 13.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the reason specified at Period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	**2**		1072	The same as the reason specified at Period 1.

ID Number = 2, Male, Earnings = 2,614 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I mainly used Supplement Payoff Tables 1 and 2. I understood well that by simply investing many units, I could not get a high payoff at all.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Because I can always receive benefit from participating in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Supposing that my opponent has the same idea, I chose a number in an attempt to make my payoff as high as possible and not to give my opponent great benefit.

When your opponent did not participate in investment:

Because investing nothing does not pay, I chose a number in order to restrain my opponent from getting great payoff and make my payoff as high as possible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. A good way to choose investment numbers would be the one I took at this experiment.

ID Number = 3, Female, Earnings = 2,813 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can understand the situation better by participating in investment than by non-participating defensively.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	4	2708	I expected my opponent's investment number to be around 10. If so, then the difference of the possible payoffs that I might receive would be small when I invest 10.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I somehow thought that nobody would participate in investment. My payoff would be low if I do not participate in investment, either. Thus I decided to choose participation
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	3405	Because I invest a little too much at the first round. I felt that my opponent would invest large units.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Everyone seems to be rather conservative (always choose participation). My payoff would be low if I did not choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because it is clear that my payoff is highest if I invest 13.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I want to try non-participation to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to get benefit surely because everyone would participate in investment at the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure by choosing non-participation at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	5	5101	I felt my opponent would invest large units because his or her way to circle "Participation" in the participation card was brave.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I feel participation more fun.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I was not certain which number should be selected, and I chose 6 somehow.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I do not like that my payoff is 706 if both my opponent and I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	My opponent's way to circle "Participation" in the participation card was brave. I feel that choosing 8 would be safe.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is more exciting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	My opponent would be conservative.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I get the hang of this game.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I thought I got the hang of it, but my opponent was a chicken. It is fine that I can get the highest payoff.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish to be a challenger one more time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I felt from his or her handwriting that my opponent would make the decision quickly and would be an active person, so that he or she would choose a relatively large number.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I wanted to try non-participation once in a while.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I have never got a pleasant experience by selecting non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I decide to choose 6 when I am not certain what to do.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I finally establish my theory.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I do no care.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to prove my theory this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because the other person would establish his or her theory, I expected him or her to invest 6-8.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I get angry if my opponent does not participate in investment, and so I choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	4	4420	I decide to choose 8 from now on. Choosing 8 or 6 seems to avoid a failure. Why?

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I have no more reason to write down.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Choosing 8 is best. Because everyone would realize it and my opponent would choose 6-8.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I understand from my experiences that I should choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I have already decided to choose 8.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing non-participation at the last time is stupid.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	5	5064	Investing 8 is good after all.

ID Number = 3, Female, Earnings = 2,813 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I almost always looked only at the pink payoff tables 1, and I seldom used supplemental payoff tables 1-1 and 1-2.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I thought that if I did not participate in investment, then my opponent would choose the most advantageous investment number which maximizes his or her own payoff. However, everyone spited me and did not care about his or her small loss. Therefore I realized that participation was better.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I realized at later periods that everyone would invest 6-8 generally. If so, then investing 8 would be most advantageous and I fixed my investment number at 8.

When your opponent did not participate in investment:

I chose the most advantageous investment number that maximizes my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think that my opponent would have the almost same idea as mine. Thus my opponent would invest 5 if I invest 5. Accordingly, it would be good to choose the same investment number such that the payoff is maximized. However, it might be better to choose a number which is slightly smaller than that number, taking account of risk.

ID Number = 4, Female, Earnings = 2804 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I chose non-participation and my opponent selected participation, then he or she would think that "I get a small payoff, but the other person can get a large payoff." (It is possible that both may fall together.)
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	4512	I chose a number so that I could receive a large payoff if my opponent's investment number is smaller than it, and I could get a reasonable payoff even if his or her investment number is larger than it.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1		513	Because I feel bitter. (You should choose participation and invest 0 rather than non-participation.)

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	5080	The same as the one specified at practice 1.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I would like to try non-participation once during practice periods.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I realized that my payoff would not be large if I did not participate in investment (the same as the one specified at practice periods).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the reason specified at practice periods.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	4	4281	The same as the above.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	I increased my investment number to cope with the person who faced with me at period 3 of the actual experiment.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	4	4281	The same as the above.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the above. (Why did my opponent at period 5 choose 4?)

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1		871	Because I feel bitter. This is the second time. My payoff is too small, comparing with my opponent's payoff. (However I did not choose 0.)

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the one specified at practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	3	3675	The same as the one specified at practice 1.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	10	9270	The same as the above. (Why did he or she choose 3?)

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	Because I feel bitter. This is the third time. I do not like to choose 0 because it seems to be the same as non-participation, but....

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

ID Number = 4, Female, Earnings = 2804 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

By looking at supplemental tables 1-2 (in which I drew lines), I searched for the most profitable investment numbers for the numbers that my opponent would choose. (I expected my opponent to choose 6-12.)

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

However I like to have a larger payoff than my opponent does.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Because my payoff would not be large by choosing non-participation. When I select 0, the other person maximizes his or her payoff by investing 11. Then my payoff is 8278 that is not so large although there is high risk.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

7-8 because of the reason specified in (3). I chose 7 at all periods except one at which I invested 9 (but I failed and then went back to 7).

When your opponent did not participate in investment:

0-1 because I felt bitter.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I did not get it. So I could not change the number that I thought to be best.

ID Number = 5, Female, Earnings = 2706 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because by choosing participation, my payoff may become large even if my opponent does not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	8	4213	Because my payoff is largest when my opponent's investment number is smallest (that is, 1).

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of a little failure at the first period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	3915	By looking at the supplemental tables 1-2.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	Because my opponent gains if I choose a number larger than 0.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I have participated in investment past three times.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I think that I get more benefit by participation than by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because my payoff increases largely as my opponent's investment number increases.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	9	8043	The same as the one specified at period 1.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is easier to maximize my profit by participation than by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because my opponent would invest so that his payoff is as high as possible when I invest 1.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	6	5272	Because as the distance between two iso-payoff curves is smaller, the payoff is larger.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I would like to know what happens when I choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	8	7038	Because I expected my opponent to invest 7-9.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to invest something.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I expected my opponent to invest 7-9.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because investment would be more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	6	5272	Because I expected my opponent to invest 7-9.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Because I expected my opponent to invest 6-9.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	0	1775	Because I expected my opponent to invest 6-9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because I expected my opponent to invest 6-9.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff become largest (by choosing this number).

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	2	2658	Because I expected my opponent to invest 6-9.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I expected my opponent to invest 6-9.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To maximize my profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	8	7038	Because I expected my opponent to invest 6-9.

ID Number = 5, Female, Earnings = 2706 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

1) I wondered whether these payoff tables are made according to some rule.
2) I looked at payoff table 1 and supplemental payoff table 1-2.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I did not participate in investment only one time, because I wanted to know what would happen if I did not participate in investment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose an investment number such that the distance between two iso-payoff curves is as narrow as possible.

When your opponent did not participate in investment:

I chose the number maximizing my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I thought it would be best to choose a number such that the distance between two iso-payoff curves is narrow (that is, the rate of increase in my payoff is large when my opponent' investment number increases by 1) if both participate in investment.

ID Number = 6, Female, Earnings = 2,097yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to try both participation and non-participation in practice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	12	7206	Because I expected my opponent's investment number to be around 10.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because practice 1 went well by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	5	2602	Because I would not suffer a large loss for any investment number of my opponent.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I wanted to try both participation and non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	1416	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I would like to get a benefit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because I can receive the highest payoff.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my opponent to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	13	12694	Because I expected my opponent would choose a number between 5 and 8.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the first period went well.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because I expected my opponent would also choose a number between 5 and 8.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be more beneficial than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	3	3463	Because I expected my opponent would also choose a number between 5 and 8.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the last time did not go well.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because choosing this number seems to be profitable.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I felt participation would go well.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is maximized.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected I could get a gain by making the decision opposite to the one last time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected my opponent to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I expected my opponent to choose participation this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected my opponent to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to get a benefit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because choosing this number seems to result in no big failure.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected my opponent to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected my opponent to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I have suffered a loss (by non-participation).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Because this is safe.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I would not suffer a loss.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is largest.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	X ↓	O ↓		Because I expected my opponent to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	

ID Number = 6, Female, Earnings = 2,097yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

By comparing table 2 with table 3, I found that my opponent gets the largest payoff by investing 11 when I do not participate in investment.

I found by table 1 that if I invest 5-7, then my opponent would invest similar units.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I expected my opponent to invest 11 when I did not participate in investment. However, my opponents did not choose that number.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose safe numbers (5-7).

When your opponent did not participate in investment:

I chose the number that maximizes my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Because the experiment repeats no less than 15 times and my opponent changes every period, it does not make sense to care about my own payoff and my opponent's payoff every period. However, several persons cared about them. Therefore it is better to invest some units rather than choose non-participation and expect my opponent to invest large units.

ID Number = 7, Male, Earnings = 2512 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to look at what would happen for the time being.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	5080	Because I expected that my opponent would not invest a large number nor a small number to look at what would happen.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish to get a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	4663	Because I expected my opponent to invest small units.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I wanted to try non-participation to look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	680	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff was low last time. I would like to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	9	4039	I expected my opponent to invest large units.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wished to receive a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I expected my opponent to invest small units.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my expectation came true last time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	9	8043	I expected my opponent to invest 10-15.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I wish to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my opponent did not participate in investment, I chose a number that maximizes my payoff.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	3	3831	I expected my opponent to invest 6-8.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my opponent's investment was not large, I tried to get a payoff surely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	I expected my opponent to invest 11 certainly (his payoff is highest in the table O×).

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	I expected my opponent to invest 6-8.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I tried to get a payoff surely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	Because my opponent will choose 11 certainly and I wish to get a high payoff.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my expectation went wrong last time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	9	7816	I expected my opponent to choose 10-14. I get around 7000 points even if he or she chooses 17-19.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected my opponent to choose 7-9.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected my opponent to choose 7-9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because my opponent's investment number was not large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		10	7031	My opponent would choose 11 if he or she wants to get a higher payoff.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wished to get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	3	3831	I expected my opponent to choose 7-9.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would get a payoff surely (provided that my opponent tries to get a higher payoff).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	I could get 7000-8000 if my opponent chooses 11.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		My payoffs were small and so I try my luck.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1		871	I chose a number so that the difference between my payoff and my opponent's is small. I did not like to choose 0.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to get a large payoff last time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	6	4960	I expected my opponent to invest at least 13.

ID Number = 7, Male, Earnings = 2512 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I took a look at the payoff tables 1 mainly.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

When I do not participate in investment, but my opponent does, if he wants to make his payoff high, then he would choose 11. If this is true, I could get 8278 surely. However, my opponents had the same idea and often wrote small numbers. After all, my payoffs were low.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I wrote how my opponents invested in another sheet. Choosing 9, 7, or 10 was frequently observed. I chose 8-10 to maximize my payoffs for such investment numbers (choosing 9 was observed six times and choosing 7 was observed two times, including practice periods).

When your opponent did not participate in investment:

I chose 11 to maximize my payoff at early periods. Later I chose a small number to make my opponent's payoff small. It was fine because my payoff was low, but my opponent's was also low.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

By choosing 7-9, I could get reasonable payoffs on average. Sometimes I chose a large number and did not participate in investment, but these choices did not pay. First I planed to never choose participation and let my opponents choose 11 to get 8278 every period. However this plan did not work because my opponents did not allow me to get large payoffs.

ID Number = 8, Male, Earnings = 2469 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		For the time being, I chose participation at first.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	10	5095	Because everybody would choose a small number at the first period.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To look at what would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		1007	Because my payoff and my opponent's are almost same.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To look at how my opponent would behave.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		1007	Because my opponent invested nothing.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To look at how my opponent would behave.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		For the time being, I chose participation at first.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Investing 7 would be most safe.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because of my success at the last period.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	Because of my success at the last period.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		So far so good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	To make my opponent' payoff as small as possible.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I expected my opponent to be a person of good faith.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I do not like to let a selfish person, who only seeks his own payoff, gets a large payoff.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I tried to be more patient and chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I stuck to choosing 7.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted harmony.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I wanted to repeat my success at the last time.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I wanted to get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	Because it is easy to compute a payoff.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I could not stand it any longer.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I have gotten reasonable payoffs by choosing 7.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I carry out my original intention.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	3	3675	Because my opponent would invest around 7, 8, or 9.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I participated in investment for the present.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	I wanted to get a higher payoff.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to get a payoff surely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because my opponent would invest around 7, 8, or 9.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	Because my opponent would choose around 7.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I made a gamble at the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	Because my opponent might attempt to maximize his payoff.

ID Number = 8, Male, Earnings = 2469 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I thought all I need was the first sheet of the payoff tables 1. It was not easy for me to see the supplemental tables, and they are little meaningful.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

5. If my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Initially I intended to participate in investment at all periods. However at many periods my opponents did not participate in investment. I was angry with them and they disturbed my rhythm.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Around 7 or 8 which were most frequently chosen.

When your opponent did not participate in investment:

I chose numbers so that both my own payoff and my opponent's were moderate.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think this experiment ends peacefully if everybody chooses participation and invests around 7 or 8. It is best. However, this does not hold if someone always chooses non-participation. It is important whether many persons want peaceful coexistence and can choose such a choice. There would be no person who invests at least 20 units because he has no gain. Thus we have to behave steadily.

ID Number = 9, Male, Earnings = 2606 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what happens.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	4850	I attempted to reduce my opponent's payoff and increase my payoff. However, I did not choose an extreme number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see how the other person reacts when I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Once again, to see how the other person reacts when I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My opponent may invest 0 when I choose non-participation. From now on I will choose participation and invest 0 when I want to not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	4201	Expecting my opponent to invest 0 at the last practice period, I chose a number so that the difference between my payoff and my opponent's is permissible.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To prevent my opponent from knowing that I may not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	0	2003	I considered the difference between my payoff and my opponent's.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	Because I would like to invest 4, 5, or 6.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	7	5812	I optimistically hope that my payoff is high.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I considered the difference between my payoff and my opponent's.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To leave a possibility that I may invest 0. Also I do not like to give a non-participant a high payoff, and everyone would have the same idea.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	7	5812	If I invest 4-6, then the other person would invest 7-12.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	The same as the above. Further, I chose a number so that my payoff is high when my opponent's investment number is 7-12.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above. Investing 8 is optimal for the investment number of my opponent at the previous period.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Investing 8 each other would continue.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I considered the difference between my payoff and my opponent's.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected my opponent to invest 7-9.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I expected my opponent to invest 6-8. Then I think investing 8 would be best when I take account of my own payoff only.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I chose non-participation and expected my opponent to invest 12 at later periods.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because one might want to make his own payoff high by investing 10-12 when few periods are left.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above. Because of my success at the previous period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

ID Number = 9, Male, Earnings = 2606 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I almost always used payoff table 1 only. It was not easy for me to compare the difference between my payoff and my opponent's payoff by using payoff table 1. Payoff table 2 was initially helpful to understand amounts of payoffs roughly. Payoff table 3 was useful to get an image of the payoff structure when making a decision.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Other (please specify) Basically 1 (it is desirable that my payoff is as high, regardless of my opponent's payoff). However, I also considered my opponent's payoff because I felt mortifying when the difference of payoffs was more than twice.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I had chosen participation till period 11, because I understood at practice periods that my opponent invested less if I did not participate. I had not participated since period 2, because I expected that many people would care only of their own payoff, but not much of my opponent's. By choosing non-participation, I tried to force my opponent to invest 10-12.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Initially I chose small numbers that seem to lead high payoffs. However, investing 7-9 was most often observed so that my payoff and my opponent's payoff were similar. Therefore I chose 8 which would be a best response to such investment numbers.

When your opponent did not participate in investment:

I always chose 6. By choosing this number, I could compromise on the difference between my payoff and my opponent's.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I did not understand what to do at early periods. However, I thought it would be good to choose 7-9 at middle periods and non-participation at later periods. My strategy for later periods was successful, but there might be a better strategy for later periods.

ID Number = 10, Male, Earnings = 1920 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The probability that my opponent participates would be 50% because this is the first practice period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	6	2587	To understand what my opponent think because this is the first practice period.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what my opponent will do.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the situation ×× in which the payoff is worst.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	4512	Because my payoff is high when my opponent's investment number is the same as mine.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as practice 3.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	0	500	To see what my opponent will do.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To put a check on my opponent's movements.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent at period 1 did not make the best investment decision leading to the highest payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I expected my opponent to choose 9.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		If my opponent participates, then he has to invest 11 units to get the highest payoff. Then I can get the payoff of 8278.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I am afraid that my opponent might choose ×.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	5	5064	Actually, if everyone chooses 8 at every period, then we can get at least 3000 yen after the experiment, according to my calculation.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	Since my opponents have chose small investment numbers, I would suffer a loss if my investment number were small.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I do not understand why subjects #3 and #14 took such behavior. So I will choose participation randomly.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I do not understand why my opponent at period 8 took such behavior.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It would be good to participate and invest 0. My payoff is 1050-2000 if my opponent investment's number is 3 or 4, and my payoff is 4000 if it is 5.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	5	2578	Because of the reason mentioned above. But if my opponent's investment number is always 4 or 5, I cannot expect a large payoff.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The previous method seems to be good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	7	4018	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	8	6383	If my opponent's investment number is 4-6, then I should choose 3-5.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I have no choice when my opponent did not participate.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	

ID Number = 10, Male, Earnings = 1920 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used payoff table 1 only. The remaining eight tables were not necessary. I do not understand why my payoff is highest when my investment number is 2 and my opponent's investment number is 24 in the payoff table for practice.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify). Initially, 3 (it is desirable that both my payoff and my opponent's payoff are as high as possible). However, I felt that my opponents' views would be 1 (it is desirable that my payoff is as high, regardless of my opponent's payoff) or 2 (if my payoff is higher than my opponent's payoff, I do not care about the absolute value of my payoff, even when the difference between my payoff and my opponent's is small). So I changed to 2.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

If everyone invests around 8, his payoff is surely 100,000. However, I sometimes decided to choose non-participation just on the spur of the moment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

At early periods, I chose 7-9 because both my payoff and my opponent's payoff were steady.
At later periods, I chose 0 or 3 because my opponents chose 4, 5, or 6 most often.

When your opponent did not participate in investment:

At every period, I chose 11 to maximize my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I can say nothing. In the current situation, it would be mentally healthy to be unconcerned with investment rather than to participate in investment.

ID Number = 11, Male, Earnings = 2391 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I participated for the time being.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	13	6766	By investing 12, I can get a reasonable payoff no matter of what my opponent's investment number is.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I would like to try many things in practice.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	My opponent gets 6117, while I only get 1613. If I invest 0, then my payoff and my opponent's are the same and they are 500. But I chose this number in practice.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what my opponent will do. He probably would choose either 13 or 0.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Non-participation is not fun. This is a practice period and so I want to try participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	Because I will be in trouble if my opponent will choose × at many times in the actual experiment, I try to force my opponent to realize that non-participation is not beneficial. My current payoff is only 500, but this is a practice period. Basically, choosing 13 is best at this time, but choosing such a number would be an investment for the future return.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing O would be better since the situation ×× may happen. If both choose O, then I could get a higher payoff. Therefore, unless my opponents choose × at many times, I continue to choose O. But if my opponents choose O at many times, I may choose ×.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Because I expected my opponent to choose around 12 at the first time.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	0	2210	I expected my opponent to choose 6-8. Then my payoff will be about 5500.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above. I do not like the case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	4	4281	I still believe my opponent to choose 6-8 this time. The person at the previous period was strange.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because most of my opponents chose O, I want to get 8272. I'll take a chance on it.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I was shocked at the result at the previous period. I will get a large payoff this time for sure.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	The same as the above.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because there seems to be a public tendency to regard non-participation as unacceptable. Choosing O would be better. I go back to my original intention.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	5	5064	My opponent would invest around this number.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue O for a while. My aim is to get 7000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5767	I hope that everyone realizes that both payoffs are reasonable by investing 8-12.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above. My aim is to get 8000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	10	8951	Investing 12 is best, but my opponent seems not to do so. Therefore I chose 9.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my success at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	I hope that everyone understand that investing 12 is best.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My opponent would not choose ×. I want to get a higher payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	6343	Choosing 12 is best, but I chose 10 because I am not confident.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My opponent would not choose ×. I would be able to get 6000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	8	7056	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		My opponent would not choose ×. My goal is to get 9000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	I made my opponent's payoff low because I was angry with him/her.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		My opponent would not choose ×. Choosing × does not lead to a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I got mad at my opponent, but I wanted to keep 2000.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	I want to get a reasonable payoff safely.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would be sorry for my opponent if I chose × at the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because most of my opponents chose 7 or 8.

ID Number = 11, Male, Earnings = 2391 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The red payoff tables (payoff table 1, 1-1, and 1-2) are sufficient. The others are wasteful. I did not look at the tables with inequalities that are difficult to see. First, I understood that my payoffs are large in the southwest part of the payoff table 1. Then I made a decision by looking at each number in it.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I thought that non-participation was not good, since the situation was worst if my opponent did not participate, either. When my opponent chose non-participation, I chose a number so that my opponent's payoff was small. Because my opponent might take such behavior, I decided to choose participation. In fact, my opponents did so when I did not participate two times. Therefore I felt everyone had the same idea and chose participation afterward.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected my opponent to choose 8-12 and chose such numbers.

When your opponent did not participate in investment:

I made my opponent's payoff low.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Choosing 8 at all periods would be best. Choosing 8 is the number maximizing my payoff if my opponent also chooses 8.
I can get 5000 points surely by choosing 8.

ID Number = 12, Male, Earnings = 2559 yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to see what happens at the first period. If my opponent invest a large amount, I am lucky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		1	514	

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I anticipated that many people would choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	I invest 13 without doubt.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected my opponent to choose participation, and I outwitted him/her by doing just the opposite.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	854	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I expected my opponent at practice 3 to invest 13, but he/she actually invested 4. I decided to participate in investment on a whim.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	The same as period 2. My opponent got 6117. I am vexed at it.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I can expect a high payoff in the pattern OO.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I anticipated my opponent to choose a small investment number.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to avoid ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	1) My opponent would expect me not to choose a large investment number. 2) I expected my opponent to choose a number deviating from the maximum number.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will choose participation unless something serious comes up.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	Choosing around 7-9 seems to be safe.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I hope that ×O will happen. My opponent will invest 11 and I will get 8278. This is my strategy. However, I am afraid of ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The strategy ×O. My opponent will be mad if he/she chooses O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It's important to know when to quit ×. It is about time that I meet the person who chooses ×.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	Because this is safe.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I am afraid of ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	Because this is safe.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I am prepared for ××. It is fine that both are regretful.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I do not like ××, but I cannot refuse the magical power of × O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I prefer ×× to O×.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		× O is profitable. But I am afraid that my opponent may invest 0 to annoy me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I stick to ×O persistently.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I pray that ×O will happen in all the remaining periods and my opponent will invest 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	I cannot understand why 6 was chosen.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Hopefully, ×O will happen and I will get 8278.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		1	905	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		At last I realize that one often bothers his/her opponent even by ignoring his/her own profit. It is too late.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

ID Number = 12, Male, Earnings = 2559 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

It was good that I could coordinate my payoff and my opponent's by comparing the table O× with the table ×O.
For the table OO, a lot of my opponents chose 7 or 8. There was no investment more than 10, nor no investment less than or equal to 5.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make my opponent's payoff as small as possible, it is fine that my payoff is moderate.

I regret that I missed to get the chance ×O (encountered the case ××) two times. Since they happened in early rounds, my opponents might invest for their own benefits and I could receive 8278. "0" and "1" were chosen one time each to spite me. Also "6" was chosen one time. I do not understand why even now. Does he/she think that the difference between his/her payoff and his/her opponent's matters?

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

I was confident that by doing the strategy ×O, the probability that I got 8278 was not small. However, out of 10 trials, I succeeded only 4 times. At the other trials, I encountered ××, or my opponents spited me.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

9. I often won by choosing 7-9. But I thought after the experiment that choosing 8 seems to be good.

When your opponent did not participate in investment:

O× never happened.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

To make a reasonable profit safely, (i) invest 8 when the case OO happens, and (ii) invest 11 when the case O× happens.

ID Number = 13, Male, Earnings = 2766

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation seems to be more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	4201	I anticipated my opponent to invest at least 15.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what happens by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	1416	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at period 2.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	13	7573	I expected my opponent would not invest a large number.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I suppose that my opponent invests 13.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected my opponent to invest 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I suppose that my opponent invests 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To recover my failure at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is highest according to Table 2.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because my opponent may not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is highest.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what happens.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I just tried this.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	I expected my opponent to invest around 10.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get a relatively large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	5	4762	I expected my opponent to invest at least 10.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I can get a higher payoff by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected my opponent (to choose participation).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected my opponent to invest at least 10.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I may get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I can get a high payoff when my opponent chooses around 10.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Non-participation is better because my opponent chooses not more than 9.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected my opponent to invest 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I think my opponent would choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	My opponent may choose a large investment number.

ID Number = 13, Male, Earnings = 2766

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The payoff table 1 is enough.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Non-participation seems to be more beneficial, but continuing it is boring.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected that my opponents' investment numbers would be similar to the numbers I would like to choose.

When your opponent did not participate in investment:

I chose a number making my own payoff high.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think it is good to choose non-participation at all periods. My payoffs were around 8000 at 10 out 15 periods. Non-participation is safe, although it is not fun. Because my opponent also seeks to get a high payoff, both rarely invest more than 8. By investing at most 8, I can only get a payoff less than 8000.

ID Number = 14, Male, Earnings = 1728 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what happens by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24	4	500	I choose the highest number because my opponent would choose 10-15.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I misunderstood the payoff structure and hence chose participation once more. My opponent's payoff was large because I chose a high number.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	7085	I chose a number that was rather less than the middle number in an attempt to make my opponent's payoff not large and my payoff a bit large.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to know what happens by non-participation and what my opponent's interpretation of payoff 2 was.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	854	

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		At period 3 I thought that I could not expect a large payoff by non-participation, unless my opponent makes a mistake.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	12	6873	My opponent would choose a small number. For the time being, I can get a reasonable payoff by choosing a middle number.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I can expect a high payoff by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	By choosing this number, my payoff is moderate and the difference between my payoff and my opponent's is not large.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Anyway, non-participation is meaningless. I am frustrated because of the result at period 2. I was disgusted with it.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	7	6343	My goal is to get 80,000 points overall. To achieve it, I want to get 8,000 points this time.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	6	4590	Because my opponent would choose 7-10 at the beginning of the game. I seek a high payoff.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Participation is more beneficial than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	I chose a number so that my opponent does not get a large payoff and I get a reasonable payoff.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Anyway, participation is great.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	2	3465	Anyway I want to get the average payoff.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I want to get a large payoff this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	7	5800	I made my opponent wealthy and will wait until the later periods.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To make a profit by investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	I punished my opponent by making his/her payoff low so that he/she will never think non-participation in investment.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I want to know what happens by non-participation. My opponents have chose non-participation three times in a row.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		1	905	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		As I expected, I had nothing good by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	To prevent my opponent from making a profit.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff by participation is higher than that by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	6	5677	I would like to get a reasonable payoff.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Participation is good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	To warn him/her. I am really mad!

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		We have to participate in investment to make a profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	8	6751	Because I expected my opponent to choose 7-9 in an attempt to get the average payoff.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		We cannot change the fact that participation is more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I have no payoff to give you!

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participation is most profitable for me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I expected my opponent to choose a number in an attempt to get 5,000-8,000.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	To seek a moderate payoff. My payoff would not choose a number such that my payoff becomes very large.

ID Number = 14, Male, Earnings = 1728 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to the payoff table 1 when deciding investment numbers. Anyway, I am pretty sure that participation is better than non-participation.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

It is good that my payoff is about the average and my opponent's payoff is around my payoff (±1000).

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Because my payoff is higher by choosing participation than by choosing non-participation. I learned from my experience that when I choose non-participation, nobody lets his/her opponent get a high payoff.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I chose a number so that my payoff is 5,000-8,000.

When your opponent did not participate in investment:

I chose 4 in the first half and 0 in the second half to prevent my opponent from choosing non-participation.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is best to always participate in investment and then invest a number in an attempt to get a payoff around the average (4,000-8,000), no matter what my opponent gets. This is because my opponent invests only 4-8.

ID Number = 15, Female, Earnings = 3062.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I seek to make a profit by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	5000	Because I expect that my opponent would choose a middle investment number at the first time.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I seek to make a profit by participation once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	6	2849	I expected my opponent's investment number to be 13-21. By the supplemental table 1-1.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the result at the second period was not good, I would like to try t it once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	13	8018	I expected my opponent's investment number to be 7-12. By the supplemental table 1-1.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because the result at the third period was not bad.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	My opponent did not participate in investment. By the payoff table 2. My opponent gets a high payoff, but how much my payoff is takes priority.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I anticipated my opponent would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	4	4078	I expected my opponent's investment number to be 10-18. By the supplemental table 1-1.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The result at period 1 was not good, but I wanted to try it one more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	10	9270	This seems to be safe.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the outcome at the last period was good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I want to try the same number as that at the last period one more, because it was not bad.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The results at the last three periods were not so good, but I will get a high payoff this time for sure.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	8	7038	By choosing a number that is smaller than my opponent's, I want to get a larger payoff than my opponent does.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I feel that participation and choosing an investment number are fun.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	From my experience at the last four periods.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Nonparticipation flashed across my mind, but I did not choose it.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	This is safe. I didn't feel like running the risk.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the results were not satisfactory so far.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	"8" seems to be good.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I cannot find any reason why I should stop participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9		2523	I considered both my payoff and my opponent's.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected my opponent to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I expected my opponent to choose a middle investment number.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I want to try participation once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected my opponent to choose a safe number.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To make a profit by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	10	9168	Because I wanted to try "8" once more.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The result at the last period was not bad. Once more!
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected my opponent's investment number to be a middle number.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To make a profit by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected my opponent to choose a safe number.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I anticipated my opponent to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because choosing "7" was not bad at the last period.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because my opponent would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9		2523	Consider my payoff and my opponent's.

ID Number = 15, Female, Earnings = 3062.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at only the payoff table 1 undoubtedly when both my opponent and I participated in investment.
I looked at not only the payoff table 2, but also the payoff table 3 when I participated in investment, but my opponent did not.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

When both participated in investment, 1. (it is desirable that my payoff is as high, regardless of my opponent's payoff).
When I participated in investment, but my opponent did not, I considered both my payoff and my opponent's.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Because I sought to get a larger payoff by choosing participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected what my opponent's investment number was, and chose a safe number.

When your opponent did not participate in investment:

I considered both my payoff and my opponent's by referring to both the payoff tables 2 and 3.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

My opponent would not invest a large amount unless he/she takes a positive attitude toward investment. It is good to expect the opponent's number and choose a safe number.

ID Number = 16, Male, Earnings = 2228yen

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I anticipated that my payoff would be larger by participation than by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	24	23849	Because I expected my opponent to choose a large investment number.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my opponent to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	4473	I expected my opponent's investment number to be 10-12 and chose the number leading to the largest payoff for those numbers.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent would also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	10	5095	I believed my opponent to invest at least 16.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I am tired of choosing participation. I take a break.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to get a high payoff by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	6	4960	I expected my opponent to invest at least 10.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I know by intuition that my opponent also participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff was maximized.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I thought that I should choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	7	5812	I expected my opponent to invest at least 10.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected my opponent to choose participation and invest "11".
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		"Please participate in investment!" I hope my opponent to do so.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I expected my opponent to choose 6-8.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I do not like to wait anymore.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Lucky "7". My opponent's number is 6-8.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because my opponent' investment number is 10.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I now understand that waiting is important.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I do not like to wait anymore!
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	Because I do not like that my opponent gets a large payoff.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I do not understand the situation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	0	3675	Because I expected my opponent to invest 10.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I do my best. Help me, please!
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	2	2210	Because my opponent's ID number is 10, his/her investment number would also be 10.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I have to choose participation. There is no other way.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I continue to choose 7.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I cannot wait at this period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2		1072	My opponent is the worst person.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Please help me. I chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I believed my opponent's investment number to be 10.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I participated in investment at the final period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I have decided to choose 7 at the final period.

ID Number = 16, Male, Earnings = 2228yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The payoff table 1 shows that my payoff is larger as my opponent ' s investment number is larger and my investment number is smaller. However, because my opponents' investment numbers were actually 6-8, I had to choose 6-8.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

Almost always, 5 (if my payoff is the same as my opponent's payoff, I do not care about the absolute value of my payoff). When my opponent did not participate and my payoff was low, I made my opponent's payoff low.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Because I thought at some periods that non-participation might lead to a high payoff.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Almost always, 7.

When your opponent did not participate in investment:

2 or 3.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

If my opponent's investment is large, then I can get a large payoff even by choosing a small investment number. However, because my opponent would choose a number between 6 and 8, it is good to choose a number so that my payoff is maximized for such a number and my payoff and my opponent's payoff are similar.

ID Number = 17, Female, Earnings = 2512 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		In the case in which I do not participate in investment, my payoff is 500 if my opponent does not participate, either, and I expected that my payoff would be small even if he/she does.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	3405	Because I expected my opponent to invest around 10 safely at the first time, I set my investment number at 8.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to try non-participation at practice. Also my payoff at period 1 was not so large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		1	514	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I noticed that if I do not choose participation, my opponent attaches greater importance to the difference between my payoff and his/her payoff than to the absolute value of his/her own payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	4	2708	I chose this number without careful consideration.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I wanted to know whether or not my opponent attaches importance to the difference between my payoff and his/her payoff when I choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I wanted to know whether or not non-participation is not beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to try to participate in investment this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	I chose 6 so that my number and his/her number would be similar.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected my opponent to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I expected my opponent to invest 4-6, and I chose a number to maximize my payoff. I did not care about the difference between my payoff and my opponent's.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		If I choose participation, then my opponent will also participate, and 6-8 will be chosen constantly. It is tedious.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I want to get a reasonable payoff safely this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	I chose 6 because I expected my opponent to choose 6.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	2	2913	The same as the above.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To get a larger payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I chose 0 because my opponent did not participate.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see how my opponent behaves by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1	6	3718	I chose 1 to make a feint.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	Because I expected my opponent to choose 6.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Because my opponents' investment numbers were 8 three times in a row, I also changed my investment number to 8.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	The same as the above.

ID Number = 17, Female, Earnings = 2512 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to the red payoff tables in particular. I hardly used the payoff tables for the cases of non-participation, because the number that the non-participation cases happened is small.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify). I changed it on a whim.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Because I wanted to know how my opponents reacted when I did not participate in investment.
Because I felt tedious when my opponents had chosen 6 constantly, I chose non-participation in the middle of the experiment.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

At the first half of the experiment, I tried to take various behaviors to see how my opponents reacted or to compete with them. However, at the second half, I had continuously chosen 6-8, taking account of my payoff.

When your opponent did not participate in investment:

I was angry at non-cooperative behavior of my opponent, and I chose the smallest number 0 to set his/her payoff at the same as my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is the best to seek my own payoff. It is silly to choose an investment number so that both my payoff and my opponent's are low in an attempt to compete with him/her. Because non-participation did not lead to a good result, it is good to choose an investment number so that both my payoff and my opponent's are high. However, because my opponent would try to compete with me, it is the best to choose 6-8.

ID Number = 18, Female, Earnings = 2092 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participation would be more profitable than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1		513	Because this is better than getting 500.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see whether or not my opponent participates. Participation would be more beneficial than non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	4201	Because 6 = 24/4 is the average number.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	8	3981	Because my payoff is the highest if my opponent chooses 0.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	0	500	Because my opponent might invest all remaining units at the last period.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To confuse my opponent by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I invested nothing because my opponent did not participate in investment.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can choose a number between 0 and 24 by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	7	4018	Because I expected my opponent to select a large investment number at early periods.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	7	4018	I chose a small investment number in the middle of the experiment.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	8	6383	It is good to select a small number if my opponent selects a small number.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	10	8130	Because I expected my opponent to choose a small number, it is profitable to choose a small number.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	6	4171	It is profitable to choose small numbers each other.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	Because my opponent selected non-participation.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	7	5440	It is profitable to choose small numbers each other.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	7	5440	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	7	5440	The same as the above.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	8	6383	The same as the above.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	5	3432	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I can get a reasonable payoff most safely by choosing around 8.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	My payoff is the largest by choosing 11 because my opponent did not participate in investment.

ID Number = 18, Female, Earnings = 2092 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (14) in Actual Experiment

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

In particular I used the payoff table 1,because I can see the whole payoff structure.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

I judged that the probability that I get a large payoff with participation is larger than the probability with non-participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:
I chose a number between 6-9.

When your opponent did not participate in investment:
I chose 0.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I can get a reasonable payoff safely by setting my investment number around 6-9.

ID Number = 19, Female, Earnings = 2832 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my opponent would not choose a large investment number if I do no participate in investment/
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	12	5740	I chose a safe number at the first time. I expected my opponent to choose a middle number safely.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I would like to know whether or not my opponent chooses around 13 if I do not participate in investment. My opponent would choose participation at this stage.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	854	

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I felt that it is wrong to make a profit easily. I understood that one would prevent his/her opponent from getting a payoff that is larger than his/her own payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		743	I do not like that my opponent gets a payoff that is larger than mine. However, because I do not like that my payoff is too small, either, I chose 4 so that the difference between my payoff and my opponent's is small.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If my opponent does not choose a large investment number when I do not participate in investment, I have to get a large payoff although my opponent also gets a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	3405	I chose a number so that my payoff is large if my opponent chooses around 13 safely.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I cannot expect a high payoff when I choose non-participation. I expected that my opponent would not choose a large investment number. My opponent would also have the same expectation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because my opponent would invest around 6-10 and I chose 7 that leads to the highest payoff for such a number.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get a reasonable payoff safely. Perhaps, I may get at least 2000 by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected my opponent to choose around 7 because I chose 7 at the last period. Therefore, I chose 6. Choosing 8 gives my opponent an advantage.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I guessed that my opponent would feel inclined to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I chose the number that maximizes my payoff if my opponent chooses around 7. I did not care about my opponent's payoff.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I feel that the participant would not want to give his/her opponent a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because my opponent would choose around 6-8. I chose 8 to make my payoff large, and I did not care about my opponent's payoff.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I wanted to go on the gamble. If my opponent considers his/her own payoff important, he/she will invest a large amount.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I felt a little guilty. The success will not continue and someone might choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because 8 is the most effective number when both choose investment numbers.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		If I do not participate in investment, then the payoff I can get is at most 8278. Therefore, I would like to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I chose 8 that lead to a large payoff because my opponent would choose 6-8.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		There seems to be only two choices: "non-participation" or "investing 8". This is dull. I went on the gamble. I can get at most 7345 by investing 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the others would also get reasonable payoffs safely and might feel that they do not like to make their opponents large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Because of my failure at the last period. I chose 8 again to get a safe payoff.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that I would be able to get at least 5000 by participation. I got less than 2000 by non-participation several periods ago.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I cannot imagine any number other than 8 so as to get a reasonable payoff safely.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because the others seem to have the same idea as mine.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10		2615	I chose a large investment number because I did not like to decrease my payoff. However, because choosing 11 gives my opponent a large payoff that is hard to get usually, I chose 10. (But I should have chosen 8.)

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I do not like to get only 706 when my opponent did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I cannot image any other number. Because my opponent would invest at most 7. So do I.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I hesitated to go on the gamble because my payoffs were low at the last two periods. If it had happened only once, I might have chosen non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Choosing this number would be the best for both my opponent and me.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get a reasonable payoff safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	My payoff is more important than my opponent's is. Please choose 8.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I chose participation again, because I was afraid that my opponent might choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	There is little difference between 2638 and 2386, and it is not interesting that my opponent also gets 4904.

ID Number = 19, Female, Earnings = 2832 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (3) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to the payoff tables for the case OO because both participated in investment at most periods. I understood that investing too much is wasteful and investing too little is not profitable. It is most effective that my investment number and the other are similar and appropriate. I referred to both the payoff tables for the case O× and those for the case ×O when my opponent did not participate in investment. I was vexed that my opponent got a large payoff when I invested a large amount.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of my opponent's payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I almost always chose participation so as to get a safe payoff. I did not participate in investment several times, because (i) I wanted to know how my opponent reacts, (ii) I became greedy for the payoff after knowing it, or (iii) I was tired of choosing participation.

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

I expected my opponent's investment number, and then I chose a number so that I received the highest payoff for that expected number.

When your opponent did not participate in investment:

My payoffs are not very different, but I did not like that my payoff was too low. I did not like that my opponent got a large payoff, either. I chose a number so that my payoff is similar to the one I got usually when I participated in investment.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I almost always chose 8 and that would be the best. By looking at the payoff tables, I think that investing a number between 6 and 8 would be appropriate. I can get the highest payoff by choosing 8 if my opponent chooses 6-8. If it is difficult to see the behavior of the opponent, then participate in investment to see how he/she reacts and invest 8. This is the most effective for both my opponent and me.

ID Number = 20, Male, Earnings = 2859 yen.

Practice 1

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what happens.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	4	2181	For no particular reason.

Practice 2

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I chose investment for the time being.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	To get the highest payoff.

Practice 3

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I chose investment for the time being. "Non-participation" is not interesting as a game.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	10	4809	Choosing this number is most effective even if my opponent invests 0. It is better if he/she invest at least 1.

Practice 4

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		"Participation" is meaningful. It is good if everyone thinks so.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	To get the highest payoff.

Period 1 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because "participation" is interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	I expected my opponent to choose at most 11. Choosing 6 maximizes my payoff when he/she chooses 11.

Period 2 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everyone seems to expect the other to participate in investment. I will come up to that expectation. Do all participate in investment?
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	The same as the above.

Period 3 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 4 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	5	4762	The same as the above.

Period 5 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I invested 11 so as to maximize my payoff.

Period 6 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected my opponent to choose at most 11. Choosing 6 maximizes my payoff when he/she chooses 11.

Period 7 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 8 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above. I wanted to avoid that both of us will come to grief (××).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	1	2427	The same as the above.

Period 9 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 10 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	10	9257	The same as the above.

Period 11 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I invested 11 so as to maximize my payoff.

Period 12 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected my opponent to choose at most 11. Choosing 6 maximizes my payoff when he/she chooses 11.

Period 13 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 14 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 15 of the Actual Experiment

	You	Your Opponent	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	4	4078	The same as the above.

ID Number = 20, Male, Earnings = 2859 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The payoff table 1. In the payoff table for the actual experiment, when my opponent chooses 0, the investment number to maximize my payoff is 11 (not 24). As the investment number of my opponent increases, the investment number to maximize my payoff decreases. Therefore, investing more than or equal to 12 is less profitable than investing less than or equal to 11. Investing less than or equal to 11 is reasonable.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and my opponent's payoff are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Because I wanted to avoid that both of us will come to grief (××). Because I supposed that a half of people would choose ×, I could not adopt the strategy that "do not participate in investment at all periods."

(6) How did you choose your investment number when you participated in investment?

When your opponent participated in investment:

Although my opponent's investment number was unknown, I expected it to be less than or equal to 11 because he/she would expect my investment number to be 0. I decided to choose my investment number to maximize my payoff when my opponent's investment number is the maximum (11).

When your opponent did not participate in investment:

I chose the number to maximize my payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

My opponents did not participate in investment only twice out of 15 periods in the actual experiment. If I had expected this, I would have chosen the advantageous strategy (the free-rider strategy) that non-participation in investment at all periods. Because my opponent would choose 11 to maximize his/her payoff when I do not participate in investment, but my opponent does, I could get a rather large payoff surely.

6. Data for the Tokyo B' Session (without the "Opponent" Wording)

6.1. Pairs of Subjects (ID Numbers) in the Tokyo B' Session: the Same as the Tsukuba A Session (see Table 3.1.)

6.2. Participation Decisions of Each Subject in the Tokyo B' Session: 1 = Participate, O = Not Participate.

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0	1	0	1	0
Period 2	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1
Period 3	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	0
Period 4	1	1	1	1	0	0	0	1	1	1	0	0	1	1	1	0	1	1	1	1
Period 5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 6	1	1	1	0	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1
Period 7	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0
Period 8	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 9	1	1	1	0	0	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1
Period 10	1	1	1	0	0	0	1	1	1	1	0	0	1	0	0	1	1	1	1	1
Period 11	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1
Period 12	1	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	1	1	1	1
Period 13	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1
Period 14	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1
Period 15	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1

6.3. Participation Decisions of the Persons Each Subject was Paired with in the Tokyo B' Session: 1 = Participate, O = Not Participate.

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	0	1	1	0	0	1	0	1	1	1	0	1	0	1	0	1	1	1	1	1
Period 2	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	0	1	1	1
Period 3	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1
Period 4	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	0	0	0
Period 5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Period 6	1	0	1	0	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1
Period 7	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Period 8	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1
Period 9	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	0	0	0	1	1
Period 10	1	1	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0
Period 11	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1
Period 12	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
Period 13	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1
Period 14	1	1	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1	1	1	1
Period 15	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1

6.4. Investment Numbers of Each Subject in the Tokyo B' Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	11	6	12	2					7	0	11	7	0	9	11		12		8	
Period 2	8	5	8		8	11	8		7	24	14		0	9	6		6	8	7	8
Period 3	0	8	8	2	8	10	7	11	7		12		0	9	6		9	8	6	
Period 4	11	9	8	2				0	7	15			3	11	6		11	3	6	7
Period 5	8	6	8	3	8	12	6	6	7	0	9	8	6	9	6	7	7	8	7	8
Period 6	8	4	8			7	5	9	7	6	11		6		6	7	11	8	8	8
Period 7	9	7	8		8	7	6	7	8	1	3		6	9	7	7	9	8	8	
Period 8	8	8	8				6	8	8	12	8	11	3	9	7	7	9	8	6	8
Period 9	7	8	8				11	11	8	24	6		6			6	7	3	9	8
Period 10	7	9	1				5	6	6	0			6			7	9	8	6	7
Period 11	7	8		4	8	7	6		8		13	11	6		7	6	9	3	3	8
Period 12	10	8	4	8	6		4	8	8	12	11		6		7	7	9	8	7	8
Period 13	7	8	8	3	10	7	4	3	8	12		11	6	10		7	7	8	7	8
Period 14	8	8	8		8		11	8	8	8	6		3	9	11	7	7	8	8	8
Period 15	8	8	8	0	8		6	9	8	12	9		6	11	11	7	7	8	8	8

6.5. Investment Numbers of the Persons Each Subject was Paired with in the Tokyo B' Session (blank means non-participation).

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1		0	7			11		2	12	6		8		12		11	9	0	7	11
Period 2	8		8	11	8		8	5	8	7	8	6		6	9	0		14	24	7
Period 3		8	9		6	9	0		12	0	7	11	7	10	8	2	8	8		6
Period 4	8	2	11	9	7	6	3	11		6	11	3			15	7	0			
Period 5	7	9	0	7	6	6	12	8	3	8	6	8	7	8	7	8	6	9	6	8
Period 6	9		6		11	6	7	8	5	7			8	4	8	8	8	11	7	6
Period 7		8	7		8	8	9	7	7	9	6	9	3	1	8	7	6	7	8	
Period 8	8	7	7	9	3	11	8	12	8	8	6				8	8	8	6	8	9
Period 9	6	8	9	3	7	6			6		7	24	8	11	11				8	8
Period 10	9	6			0	6	6	5				1	9	7	6	8	7	7		
Period 11	6	8	4		8	8	3	3	9	6	7		7	11	13		8		6	7
Period 12	8	7		6		11	12	8	8	4		6	8	4	8	8	7	10	9	7
Period 13	8	7	8	7	8	7	7		10	6	11		12	8	3	4	7	10	3	8
Period 14	8	7	7	11	9	3		6	8	8	8	11		8		8	8	8	8	8
Period 15	0		8	8	8	8	8	8	8	7	7	11	11	6		9	12	8	9	6

6.6. Pairs of Investment Numbers in the Tokyo B' Session (blank means non-participation and boldfaced numbers indicate data of subjects who did spiteful behavior).

Period 1			Period 2			Period 3			Period 4			Period 5			Period 6			Period 7			Period 8		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,6	11		1,5	8	8	1,10	**0**		1,3	11	8	1,16	8	7	1,8	8	9	1,12	**9**		1,9	8	8
2,10	6	0	2,8	**5**		2,18	8	8	2,4	9	2	2,11	6	9	2,14	**4**		2,3	7	8	2,16	8	7
3,9	12	7	3,7	8	8	3,17	8	9	5,20		**7**	3,10	8	0	3,13	8	6	4,20			3,15	8	7
4,8	**2**		4,6		11	4,16	**2**		6,19		**6**	4,9	3	7	4,12			5,19	8	8	4,14		9
5,7			9,20	7	8	5,15	8	6	7,18		**3**	5,8	8	6	5,11		11	6,18	7	8	5,13		**3**
11,20	11		10,19	24	7	6,14	10	9	8,17	0	11	6,7	12	6	6,10	7	6	7,17	6	9	6,12		11
12,19	7	8	11,18	14	8	7,13	7	0	9,16	**7**		12,20	8	8	7,9	5	7	8,16	7	7	7,11	6	8
13,18	**0**		12,17		**6**	8,12	11		10,15	15	6	13,19	6	7	15,20	6	8	9,15	8	7	8,10	8	12
14,17	9	12	13,16	**0**		9,11	7	12	11,14		11	14,18	9	8	16,19	7	8	10,14	1	9	17,20	9	8
15,16	11		14,15	9	6	19,20	**6**		12,13		**3**	15,17	6	7	17,18	11	8	11,13	3	6	18,19	8	6

Period 9			Period 10			Period 11			Period 12			Period 13			Period 14			Period 15		
ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #		ID #	Invest. #	
1,11	7	6	1,17	7	9	1,13	7	6	1,18	10	8	1,2	7	8	1,19	8	8	1,4	8	0
2,20	8	8	2,13	9	6	2,5	8	8	2,15	8	7	3,20	8	8	2,17	8	7	2,6	**8**	
3,19	8	9	3,12	**1**		3,4		**4**	3,14	**4**		4,19	3	7	3,16	8	7	3,5	8	8
4,18		**3**	4,11			6,20	7	8	4,13	8	6	5,18	10	8	4,15		11	7,20	6	8
5,17		**7**	5,10		**0**	7,19	6	3	5,12	**6**		6,17	7	7	5,14	8	9	8,19	9	8
6,16		**6**	6,9		**6**	8,18		**3**	6,11		11	7,16	4	7	6,13		**3**	9,18	8	8
7,15	11		7,8	5	6	9,17	8	9	7,10	4	12	8,15	**3**		7,12	11		10,17	12	7
8,14	11		14,20		**7**	10,16		**6**	8,9	8	8	9,14	8	10	8,11	8	6	11,16	9	7
9,13	8	6	15,19		**6**	11,15	13	7	16,20	7	8	10,13	12	6	9,10	8	8	12,15		11
10,12	24		16,18	7	8	12,14	11		17,19	9	7	11,12		11	18,20	8	8	13,14	6	11

6.7. Payoffs of Each Subject in the Tokyo B' Session

ID#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Period 1	2658	2003	5800	1072	706	8278	706	1186	11480	3244	2658	7340	706	10877	2658	8278	7007	706	6526	8278
Period 2	7345	1775	7345	8278	7345	2658	7345	2578	7340	500	5393	3244	706	5765	8209	706	2003	13576	31155	6526
Period 3	706	7345	8225	1072	5766	7816	2210	2658	11480	706	5800	8278	4018	8951	7237	1186	7250	7345	2003	3244
Period 4	6765	3411	10173	6984	4018	3244	1554	8278	2210	4065	8278	1554	1297	2658	15694	4018	2658	1297	2003	2210
Period 5	6526	8209	2386	5440	5766	5249	11589	7237	3675	4904	5765	7345	6339	7250	6339	7340	5681	8225	5681	7345
Period 6	8225	1536	5766	706	8278	5681	6115	7250	4950	6339	2658	706	7237	2017	7237	7340	6765	10173	6526	5766
Period 7	2523	7340	6526	706	7345	7340	8209	6478	6526	6475	4590	5907	3463	2944	7340	6478	5765	6526	7345	706
Period 8	7345	6526	6526	5907	1554	8278	7237	11242	7345	6385	5766	2658	1297	2523	7340	7340	7250	5766	7237	8225
Period 9	5681	7345	8225	1554	4018	3244	2658	2658	5766	500	6339	37111	7237	8278	8278	2003	2210	1297	7250	7345
Period 10	8271	5765	871	706	706	3244	5272	4762	2003	706	706	905	8209	4018	3244	7340	6481	6526	2003	2210
Period 11	5681	7345	2017	1536	7345	7340	3463	1554	8225	3244	5406	2658	6339	8278	12694	2003	7250	1297	4590	6526
Period 12	7056	6526	1536	5766	2003	8278	11416	7345	7345	4250	2658	3244	7237	2017	7340	7340	6481	9168	8271	6526
Period 13	7340	6526	7345	5440	7056	6478	5812	1297	9168	5249	8278	2658	11589	7056	1554	4281	6478	9168	3675	7345
Period 14	7345	6526	6526	8278	8225	1554	2658	5766	7345	7345	7237	8278	1297	7250	2658	7340	7340	7345	7345	7345
Period 15	2386	2386	7345	4904	7345	4904	7237	7250	7345	5800	6481	8278	10384	5504	2658	8271	11480	7345	8225	5766

6.8. Record Sheets and Questionnaires for the Tokyo B′ Session

ID Number = 1, Female, Earnings = 2833 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what happens by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	8	4381	My payoff I can get is not bad even if the other person chooses 0.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what happens by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoff would be larger by participation than by non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	9	5019	Because the other person seems to be timid.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		To see what happens by non-participation once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I can avoid the case ×× by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because I want to get the highest payoff.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I feel that participating in investment is not unfair to both the other person and me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I think that the other person chose 8 in practice.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participation seems not to suffer a loss.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	Because I was a little mad.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To give the other person a favorable impression on me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	It is silly to choose a large number. But I would like to give the other person a reasonable payoff.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To give the other person a favorable impression on me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because many persons have chosen 8.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I expected the other person not to choose ×.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	Because I expected the other person to choose around 7-10.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected to get a higher payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9		2523	I chose a number so that the payoff of the other person is not large and my payoff is not small.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To increase choices available to me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because the other seems to be a good person.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To give the other person a favorable impression on me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because the other seems to be timid.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be safe probably.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	Because I expected the other person to choose 7 or 8.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because I thought that we would finish by breaking even if I chose 7 or 8.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	8	7056	It was not bad to get at least 5000.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected the other person to choose 8 or 9.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To give the other a favorable impression on me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected the other person to choose 8 perhaps.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To enlarge available choices.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	0	2386	Because I expected the other person to choose 7 or 8.

ID Number = 1, Female, Earnings = 2833 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

By looking at the payoff tables, I felt that if my investment number and the number of the other person is similar, we finish by breaking even.

I looked at the payoff table 1 when I decided my investment number.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and the payoff of the person I am paired with are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

To give the other a favorable impression on me.
To enlarge available choices.

(6) How did you choose your investment number when you participated in investment?

When the person you are paired with participated in investment:

I judged whether or not the other person was timid by looking at his/her way of writing.
Then I chose a number by using the payoff table.

When the person you are paired with did not participate in investment:

Because I was mad, I wrote 0, too.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is good to choose numbers so that we finish by breaking even.
The reason: If one person gains, then the other loses and feels unhappy. It is desirable that everyone feels receiving equal payoffs.

ID Number = 2, Female, Earnings = 2659 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get used of the experiment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	12	6785	To see what happens.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what happens once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	16	10411	Because my number was small.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		To save investment for the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is last.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	5	3093	I occasionally invested a large amount.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is first.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	0	2003	Because it would be good to invest this amount at the first time.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because the result at the first period was unexpected.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5		1775	Because my payoff is similar to the payoff of the other person.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I have not gotten enough payoffs.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected not to incur a large loss by choosing this number.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I got a reasonable payoff finally.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	2	3411	Because I expected that both would not incur large losses.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoffs were not good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	Because I expected that both would not incur large losses.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I got a reasonable payoff at last.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	Because both payoffs were similar.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because my payoffs were not good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected that both would not incur large losses.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I got a reasonable payoff at last.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected this to be the average number.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I got a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	Because both payoffs were similar.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I got a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected this to be the average number.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I got a reasonable payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected the other person to choose the same number.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because non-participation is not profitable for both the other person and me.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I expected this to be the average number.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because this is last.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8		2386	The same as the above.

ID Number = 2, Female, Earnings = 2659 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to the payoff table 1. I marked the investment numbers that maximize my payoffs, and I chose investment numbers so that my payoff and the payoff of the other person were similar and they became the highest.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and the payoff of the person I am paired with are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Because non-participation was not profitable for both the other person and me.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I chose investment numbers so that my payoff and the payoff of the other person were similar and they became the highest.

When the person you were paired with did not participate in investment:

I chose investment numbers so that my payoff and the payoff of the other person were similar.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Because I do not know who the other person is, it is good that both my payoff and the payoff of the other are similar. If I consider my own payoff only, then there is the risk that the other person decreases his/her investment number after all.

ID Number = 3, Female, Earnings = 2858 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get a higher payoff by choosing participation, regardless of whether or not the person I am paired with chooses participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	12	6194	Because I expected the other person to invest around 10-12.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	8	4213	Because I expected the other person to choose around 12.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	7	3792	Because I expected the other person to choose around 12.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participation is more beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	The other person did not participate in investment.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get a higher payoff by choosing participation, regardless of whether or not the other person chooses participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	7	5800	I expected the investment number of the other person to be 12.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected the other person to invest 7-9.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	I expected the investment number of the other person to be 8.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	The same as the above.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	0	2386	The same as the above.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	The same as the above.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected the investment number of the other person to be a number between 6 and 8.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	The same as the above.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1		871	The other person did not participate in investment.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because by choosing non-participation I get a high payoff if the other person participates in investment and invest a lot of amounts.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I would get a larger payoff by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because if everyone participates in investment, then my payoff and the payoff of the other person are similar and reasonably high.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected the investment number of the other person to be between 6 and 8.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected the investment number of the other person to be 8.

ID Number = 3, Female, Earnings = 2858 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

The situation that both do not participate in investment is the worst. I referred to the payoff table 1. When I only participated in investment, but the other person did not, I looked at the payoff table 3 to see how my investment affects the payoff of the other.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and the payoff of the person I am paired with are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I wish I had participated in investment at all periods, because both could have gotten large payoffs if everyone had participated in investment. However, the other persons did not participate in investment twice, and I did not choose participation once, because I thought that I would get a large payoff if the other person invests a lot of amounts. Nevertheless, I realized from the result that participating in investment is good for both the other and me, and thereafter I had participated in investment at all remaining periods.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I chose a number so that my payoff and the person of the other person became similar.

When the person you were paired with did not participate in investment:

I chose a number so that the other person did not get a large payoff even though I suffered a loss.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is the best to participate in investment and set the investment number at around 8 in all periods. This is because the payoffs of participants are equally large.

ID Number = 4, Male, Earnings = 1926 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I do not like that my payoff is 500 if the other person also chooses non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	4368	I would like to get at least 1000. Choosing 7 gives the other person at most 4000.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		There isn't much to be gained by choosing non-participation. The payoff I can get by choosing participation and investing 1 is almost the same as that by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	10	5707	The other person will choose a number between 7 and11 if he/she realizes that investing a lot of amounts does not lead to a large payoff.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	4	2524	By looking at the table carefully, I understand that it is good to invest 2-13.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		1007	I checked the payoff of the other person by using the payoff table 3, and did not let him/her get more than 1508. I want to get at least 1000.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because it seems to me that I cannot get a high payoff in both the case of ×× and the case of ×O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2		1072	To get at least 1000. I do not like to let the other person get a high payoff.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I do not know what will happen, but for the time being I try non-participation to see what the other person thinks.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected that the same thing would not happen this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2		1072	The same reason as that at period 1.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I believed the other person to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	9	6984	I expected the other person to choose 9-11.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everyone seems to get a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	7	5440	To make my payoff high and the payoff of the other person low. I expected the other to choose 9-13.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I expected the other person to choose 11 because he/she would consider his/her payoff only.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Choosing non-participation would be better although it is risky. If the other person chooses participation, I can get 8278 surely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I believed the other person to choose participation next time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I can get a large payoff if the other person chooses participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I stick to choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I will participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4		1536	I consider both my payoff and the payoff of the other person. Investing 4 is not bad.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I believed the other person to choose participation. Everyone would get a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I expected the other person to choose 6-8.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I chose participation to get at least 2658.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	2	7	5008	Because I expected the other person to choose 7-10.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I would like to go on the gamble. The other person would choose around 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will surprise the other person by choosing participation and investing 0.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	8	4904	To get a large payoff.

ID Number = 4, Male, Earnings = 1926.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

Only the payoff tables A were useful. It is meaningless to invest more than 11. I found that which investment number I should choose to maximize my payoff for each number of the other person: 11 for 0-1, 10 for 2-3, 9 for 4-5, and 8 for 6-8. I was surprised that my payoff is always smaller than the payoff of the other.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify). I tried to take behavior that the other person did not expect. When the other person took behavior as I expected, I attempted to make the payoff of the other low and my payoff high.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I considered how behavior of the other person would change as rounds advanced.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I chose an investment number between 2 and 4 to get a larger payoff than the other person does. At early periods, I chose a number between 6 and 8, but I did not like that the other person obtained a larger payoff than I did.

When the person you were paired with did not participate in investment:

I chose a number so as to make the payoff of the other low. I did not care that my payoff was low.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. Choose 8 if the other person participates in investment, and choose 11 otherwise. By choosing 8, my payoff is close to the maximum value, regardless of which number the other chooses. I think this is the best choice.

ID Number = 5, Male, Earnings = 2557 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected the other person to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because the other person may not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my payoff is maximized.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		For no particular reason.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	11	6432	Because I expected the other person to invest 13.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the other person seemed to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	1416	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because the other person seemed to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I think chances are about even that the other person will participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected the other person to invest a number between 7 and 11.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the case ×× is worse than the case O×.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Because I expected the other person to invest 8.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected the other person to choose O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the other person seemed to be spiteful.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Because I expected the other to invest 7.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because it is better to choose × more often.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is not necessarily true that I get 8000 in the case ×O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I think that investing 8 is the best choice.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I would like to choose × more often.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because it would be better to choose × more often.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I would like to get 8000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the other person seems to be spiteful.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I think investing 8 is the best choice.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I expected the other person to choose non-participation at late periods.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I chose a smaller number so that the other person will not choose ×.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I cannot get a large payoff by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	8	7056	Because the investment number of the other person seems to be small.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing participation is steady.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	I decide to choose 8 in the case OO.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the result at the last period was good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected the other person to choose 8.

ID Number = 5, Male, Earnings = 2557 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (1) in Practice・Actual Experiment

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked only at the upper-left part in the first page of the payoff table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

My behavior might affect behavior of all others because the number of persons in the experiment is not large. Therefore, I sometimes took behavior so that the payoff of the other became high a little. But I almost always cared only about my payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At early periods I often chose non-participation because I thought the other persons would consider their own payoffs only. However, most persons did not consider their own payoffs most important. Because I realized this, I chose participation at later periods.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

When the other person chooses 8, choosing 8 maximizes my payoff. I thought the other person would care only about his/her own payoff when both choose participation.

When the person you were paired with did not participate in investment:

I chose the number so that my payoff is maximized.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. Choose 8 if the other person participates in investment, and choose 11 otherwise.

ID Number = 6, Male, Earnings = 2758 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I want to try participation to see what happens at a practice period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because the other person invested 0.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	4381	Because I expected the other person to choose a large number.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the other person would feel boring if I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	7	2807	Because I can get a large payoff.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I want to try non-participation to see what happens at a practice period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the probability that my payoff is 706 is 1/25, while the probability that my payoff is 8278 is 24/25.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I would like to avoid the situation ×× in which neither participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because the other person chose ×.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would like to avoid the situation ××. I want to get a larger payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	9	7816	The other person chose 0. The other can get a large payoff if his or her investment number is small and my investment number is large. The other would choose a relatively small number.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the probability that my payoff is 706 is 1/25, while the probability that my payoff is 8278 is 24/25.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I want to avoid the situation ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	6	5249	Because the probability that my payoff is greater than or equal to 8278 is large.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get a payoff that is greater than or equal to 8278.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	Because the probability that my payoff is greater than or equal to 8278 is large. My payoff would be large.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the numbers the other persons chose have been less than 10.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the probability that my payoff is large is higher by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because at three periods the other persons did not invest 11 when I did not participate in investment. I would like to avoid the situation ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because the probability that my payoff is greater than or equal to 8278 is large.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the probability that my payoff is large is higher by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I would like to avoid the situation ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because the probability that my payoff is greater than or equal to 8278 is large.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the probability that my payoff is large is higher by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		8	4904	

ID Number = 6, Male, Earnings = 2758 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used the red payoff table (payoff table 1) only. I drew lines in the payoff table to distinguish the region in which my payoffs are at least 10,000, the region in which my payoffs are at least 20,000, and so on. I considered which investment number I should choose to get a payoff that is larger than some amount. But because the other persons seemed not to consider their own payoffs most important, or we might make mistakes in writing numbers, things did not go just as I wanted. I thought there might be some mistakes in the payoff tables of the other persons.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

Because I expected that when I did not participate in investment, the probability that my payoff is 706 is 1/25, while the probability that my payoff is 8278 is 24/25

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

7. I wanted to get at least 8278 when I participated in investment. Therefore, the probability that my payoff is at least 8278 becomes large when I choose a number between 3 and 10. Among them, choosing 7 leads to the largest payoff.

When the person you were paired with did not participate in investment:

11. Because my payoff is maximized.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I thought that the other person would consider increasing his/her own payoff to be most important, as I did. That was wrong.

ID Number = 7, Male, Earnings = 2755yen

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get used to the experiment and to see what the other person will do.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	3195	Because this is a proper number.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I wanted to know what happens by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	10	5707	To get the average payoff safely. (I hope the other person to invest a large investment number. If so, then I can choose a small number).

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wished the case O× would happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	11	6156	Because this is the last period, the other person might choose a large investment number.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I want to see whether or not my expectation on the case in which only the other person chooses an investment number is accurate.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get a bit of money.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	To get the average payoff safely.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To avoid the worst case ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	0	2210	I expected the other person to choose a safe number.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I wanted to do a different thing.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	I could get a large payoff if the other person wants to save a nice bit of money.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		By intuition.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	12	11589	I optimistically expect to the other person to choose a large investment number.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I hope the same thing to happen again.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	7	6115	The same as the above.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing participation is not bad.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	Perhaps the other person would choose a large number.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Participate is a precondition for making a profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	This is the turning point. The other person would choose a smaller number (6 or 7).

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To make a profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	My payoff is most important in this case. It is not significant to increase the payoff of the other.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	5	6	5272	The other person might choose a smaller number.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My goal is to get 3,000 yen. To achieve this goal.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	3	3463	The other person would choose a smaller number.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I wanted to avoid both the case ×× and the case ×O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	12	11416	I expected the other person to choose a small number.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation is a precondition for making a profit.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	7	5812	Three periods to go. I would like to score my points safely.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because the probability that I make a profit is higher by participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	It is important to score my points in this case.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish my total points would reach 30,000 points by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I expected the other person to choose 6.

ID Number = 7, Male, Earnings = 2755 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I referred to the payoff table 1. Because I found that choosing non-participation was very risky in the middle of the experiment, and afterwards I decided to choose participation.
It may be more efficient to participation and invest 0.
It is easy to get a high point by choosing participation.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Because I thought there would be persons who hope the case (×, O) happens by choosing non-participation so as to increase their points.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I invested a number between 5 and 7 in an attempt to get at least 5,000 safely.

When the person you were paired with did not participate in investment:

I invested the number that maximizes my payoff (2,658) in that case.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It would be the best choice to participate in investment at every period and choose an investment number so as to get the average payoff safely rather than seek a large payoff, because it is fine that the sum of payoffs are large.

ID Number = 8, Male, Earnings = 2559 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	12	6194	I chose a number so that I can get a reasonable payoff, regardless of which number the other person chooses.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because participation would be beneficial.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	0	500	

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	3	1667	Because I could get a better payoff.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected my opponent to choose 13.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		24	24157	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		A single-bout match.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I expected the other person to invest 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		5	2578	

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because I can the highest payoff.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	11	8278	To get a large payoff.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The probability that I can get a reasonable payoff safely is large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I hoped the other person to invest 11.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	To get at least 5,000.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Because the other person would attempt to get around 7,000-8,000.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	12	11242	To get at least 5,000.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To seek 6,000-7,000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	To get the highest payoff in this case.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To make a profit safely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	5	4762	To get at least 5,000 surely.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing participation is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	To get at least 5,000 surely.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because choosing participation is safe.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	Malice.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get at least 5,000.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	To get at least 5,000.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	The same as the above.

ID Number = 8, Male, Earnings = 2559 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I almost always use the red table. I thought that getting around 5,000 surely is better than going on a gamble in an attempt to get a large payoff.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

The reason why I did not participate in investment at the first two periods is that I expected the other person to choose 11. The reason why I participated in investment is that I could gain 5,000-8,000 points by investing 6-8.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I wanted to get at least 5,000 points. I expected the other person not to invest more than 12. Therefore it would be good for both of us to choose 6-8.

When the person you were paired with did not participate in investment:

I chose the number maximizing my own payoff. But as an exception, I chose a number so that I was even with the other person once.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It would be good to participate in investment positively in an attempt to gain around 7,000-8,000, because a cunning plan is seldom successful. Many people thought that their opponent did not want to make a profit.

ID Number = 9, Male, Earnings = 3373 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing participation would be less risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	4	2700	I chose a safe number because I could not expect which number the other person would choose.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because this is less risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my own payoff is maximized.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	7	3792	I chose a number leading to a large payoff for the number the other person chose at practice 1.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I have participated in investment at all previous periods.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	1416	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because at a practice period, when I did not participate in investment, the other person took behavior so as to reduce my payoff rather than maximize his payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	11480	Because I expected the other person to choose a small number, I chose a number leading to a large payoff for such a number.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because this is less risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the case in which both the other and I choose participation is beneficial to both.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	11480	The same as the above.

Period 4 of the Actual Experim1ent

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I chose a number so as not to make the payoff of the other person large.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the case in which both the other and I choose participation is most beneficial to both, and participation is less risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	3	3675	Because I can get a reasonable payoff even if the other chooses a small number.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	5	4950	The same as the above.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because the numbers that the other persons chose become smaller.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I expected the other person to choose a number between 4 and 8. I chose a number so as to make my own payoff large for such a number.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The case in which both I and the other choose participation is beneficial to both. The persons I was paired with participated in investment at most periods. I would like to avoid the case in which neither participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I chose a number so as to make my own payoff large for numbers around 7 that many of the persons I was paired with chose.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I chose a number so as to prevent the other person from receiving a large payoff.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I would not get a large payoff even if I choose non-participation and the case ×O happens. There is no reason why I should choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	I chose a number so as to make my own payoff large for numbers around 7 that the other person would choose.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The case in which both the other person and I choose participation is most beneficial to both. The persons I was paired with participated in investment at most periods. Participation is less risky.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	10	9168	I chose a number so as to make my own payoff large for the numbers that many of the persons I was paired chose in the past (6,7,8, or 9).

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I know that the case in which both choose 12 is most profitable to both. However, this is the only number that I can choose because the other person would choose a number between 6 and 10.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

ID Number = 9, Male, Earnings = 3373 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 1 mainly. I sometimes referred to Supplemental Payoff Table 1-1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

I basically chose a number so as to make my own payoff large. However, in the case O× in which I participated in investment, but the other person did not, I attempted to reduce the payoff of the other person.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

The case in which both the other person and I choose participation is most profitable. I would not get a large payoff even when the other person chooses participation, but I do not.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I expected which number the other person would choose, and I chose a number so as to maximize my payoff for the number of the other person that I expected.

When the person you were paired with did not participate in investment:

I chose a number so as to keep my payoff reasonably large and make the payoff of the other person small.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think it is the best that both choose participation. If both choose non-participation, then both suffer losses. If only one person chooses participation, the participant would often take behavior so as to reduce the payoff the non-participant. I know that the case in which both choose 12 is most profitable to both. However, I always chose 7 or 8, because I expected the other person would choose a number between 5 and 10.

ID Number = 10, Female, Earnings = 1970yen

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I thought it is better to participate in investment so as to see what happens in the experiment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	I chose the number that maximizes my payoff, because the other person did not participate in investment.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To see which number the other person chooses if he participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	I cannot believe people because non-participation has been chosen. I treated the other person to a painful experience. This is just a practice period.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I believe the other person to be nice this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	4	8	3701	Because the ID number of the other person is 4. I hope that he is a nice person and choose a large number.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is more interesting to consider which number I should choose after selecting participation. I do not want to displease the other person.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	15	9	3653	The other person will be happy if I choose a relatively large number. This is also a safe number for me.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I could not go on a gamble if I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	6	3244	Because I have already decided to choose this number at first.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24	7	500	The person who runs the risk in the actual experiment is a real gambler.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I had not chose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I was a little damaged by the painful treatment of the other person at the last period, although I know the person I am paired with at this period is different from the person at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	15	6	4065	Because the ID number of the other person is 15.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing participation is more interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	8	4904	The persons I was paired with had chosen safely the numbers around 6 or 7. I do no like that they attempted to get payoffs that are larger than mine. I could not receive large payoffs.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because the ID number of the other person is 6. Everybody has the same idea if he choose a number between 5 and 10. It is not interesting.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	1	9	6475	It is not interesting to choose 0 all the time.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	8	6385	Because I find that if everybody in this room invests 12, then he gets the largest payoff safely. But why do people want to get a little larger payoffs than the others do?

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because it is fun to see behavior of the other person by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24		500	First I thought I should get revenge on the other person. But I did not. Instead, I chose an unusual number because the difference of my payoffs is only 200.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	I got revenge on the other person. I was not magnanimous enough to invest 24 twice.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Revenge. I also want to see how the other person will respond to this. Will everybody choose 0?
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I believe that the other person chooses participation this time. I would like to see his behavior.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	4	4250	The same as the reason when I chose 12 last time. Is there anyone who has the same idea as mine?

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish the other person might also choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	6	5249	The same as the above.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I would get a reasonably large payoff by choosing this number.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	7	5800	Because I stick to this number. The other person will also be happy somewhat.

ID Number = 10, Female, Earnings = 1970yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

At the beginning I considered the case O× by looking at Payoff Table 2, and found that the other person gets a large payoff. Then I considered how the other person would behave by looking at Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify). It depends on my mood. Because the others invested similar units, I did not like to choose numbers similar to them. I am angry that the maximum of the numbers the others chose was 9.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

Because I understood that choosing non-participation does not mean that I can run a great risk.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

It depended on my mood at the beginning. But after seeing the whole investment pattern, I understood that I could not get a large payoff by investing an extreme number. I also tried to realize the situation in which everybody gets the highest equal payoff, but I failed. At last I found that choosing 8 is safe.

When the person you were paired with did not participate in investment:

0 or 24. No other choice. When non-participation was selected many times, I could not be magnanimous.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Everybody should invest 12. It is sad that because all people are selfish, the payoffs that they can get are smaller than the highest equal payoff. I think it is better that everyone becomes happy.

ID Number = 11, Female, Earnings = 2574yen

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My payoff is the highest when I invest 0 and the other person invests 24. But I chose participation to see how the other person will behave. (If I choose ×, then the other person would also invest nothing.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	10	5407	By choosing this number, my payoff is high if the other person chooses more than 12, and the loss of my payoff is the smallest even if he chooses less than or equal to 12.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To check the response of the other person. I would like to see whether or not the other person invests 13 that maximize his own payoff when I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to see whether or not the other person chooses participation and then invests 0, when I choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	7234	My payoff is not bad if the other person chooses a similar number. If he chooses more than 8, then my payoff becomes high.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To check the response of the other person once more. I want to see whether or not the other person will punish me. The same as period 2.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To increase my payoff. If I do not participate in investment, then my payoff might be 706.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	I chose the number maximizing my own payoff.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I could not choose a large investment number if I did not participate in investment, and everybody will choose a smaller number if the investment number is not large.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	14	8	5393	I chose a number so that my payoff is little influenced even if the other person chooses 0.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To get a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	7	5800	Because the other person would not choose more than 20, this is a reasonable number.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I hoped that the other person would invest 11. If so, then I can get 8278.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will invest a rather small number after choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	By choosing this number, I am not in trouble even if the investment number of the other person is small. My payoff is large if it is at least 4.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because non-participation is the final strategy to increase my payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	To make my payoff the highest.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to try a small number after choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	6	4590	The other person would not choose a large investment number. But I would like to see what will happen if I chose a small investment number.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing participation is more interesting because I have many options.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	I expected the other person to choose around 6-8. I chose 8 that leads to the highest payoff for those numbers.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everybody seems to choose around 6. I participated in investment to see whether or not that is true.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	I expected everybody to invest around 6. That seems to be true.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because I have been at a deadlock, I chose non-participation that leads to the highest payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will let the other person dream of his success.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	7	5406	I expected the other person to choose a number between 3 and 6. I am satisfied with 3,000-4,000 units of payoff. But my payoff is less than a half of the other person's.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		It is reasonable to participate in investment and then choose around 6-7.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	The other person is also at a deadlock. I was forced to choose the number maximizing my payoff.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I am aiming at recovering my lost position.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to avoid the situation in which neither participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I chose a safe number. The other person would choose a similar number, because he has the similar experiences.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	

ID Number = 11, Female, Earnings = 2574 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

First I drew lines indicating high payoffs in the rough payoff table (the supplemental payoff table 1-1). Then I looked at the detailed payoff table 1. I expected that everybody would choose around 6-9.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

3. It is desirable that both my payoff and the payoff of the person I am paired with are as high as possible.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

When I participates in investment, my payoff was small. Therefore I sometimes chose non-participation.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I expected the other person to choose a number between 6 and 9. I chose a number not to suffer a loss when the other person chose such a number. I chose large numbers at the early stage and then smaller numbers between 6 and 9.

When the person you were paired with did not participate in investment:

I always chose "11" so as to maximize my payoff when the other person did not participate in investment.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is good to choose a number between 6 and 9 usually, but choose non-participation sometimes (by expecting when the other person participates in investment). The sum of my payoffs would be the highest if I did not participate in investment at all periods.

ID Number = 12, Male, Earnings = 3305 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I can get the highest payoff on average by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my payoff is the highest.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I get a large payoff if the other person chooses a large number.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the other person seems to participate in investment, too.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13	15	7335	Because my payoff would be about average.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing participation is more interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	Because I expected the other person to choose a number between 7 and 9.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the other person might choose a large investment number (people usually choose 11).
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the other person would usually choose 11 if he participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The other person would usually choose 11 if he participates in investment. Then my payoff is not bad.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing participation seems to be more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because this would be the most reasonable number.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		Because the other person would usually choose 11 if he participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the other person would usually choose 11 if he participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		9	5907	

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because choosing participation seems to be more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my own payoff is maximized by choosing this number.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I wish the other person to participate in investment and then choose 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		24	37111	

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I wish the other person to be generous.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		1	905	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I understood that there are persons who do not care about their own payoffs, I participated in investment this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my own payoff is maximized.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I may be paired with a generous person once more.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because choosing participation seems to be more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my own payoff is maximized.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I wish the other person to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the other person would usually choose 11 if he participates in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

ID Number = 12, Male, Earnings = 3305 yen.

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

First I looked at the supplemental payoff tables to understand the payoff structure roughly. Then I decided my investment numbers by using the detailed payoff tables.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

4. I participated in investment several times, but the number of periods at which I did not participate in investment was greater than the number of periods at which I did.

The reasons for your decisions on participation:

I expected the other person to choose around 7-9 if both participate in investment, and to choose 11 usually if only he participates in investment.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I chose numbers that seemed be safe.

When the person you were paired with did not participate in investment:

I chose the number maximizing my own payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think that it is the best to choose an investment number so that I suffer no loss although my payoff is not very large.

ID Number = 13, Male, Earnings = 2553 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it is more likely that I get a large payoff by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	0	1503	Because my payoff seems to be about average by choosing this number.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get a large payoff by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	0	500	Because my payoff was smaller than the other person's was at the last period, I chose the same strategy as his.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I can get only 500 if I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		500	I do not like to give the other person a large payoff.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I want to see how the other person will respond when I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because it is more likely that I will get a large payoff by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	Because I do not like to give the other person a large payoff when he does not participate in investment.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I believe that I can get a large payoff if I participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0		706	Because I do not like to give the other person a large payoff when he does not participate in investment.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I think I can decide my payoff by myself if I choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	7	4018	Because it is likely that I get a larger payoff than the other person does by choosing this number.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because choosing participation is more interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	I accept the small difference between my payoff and the other person's.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The deep game with the other person after choosing participation is interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because I expected the other person to choose a similar investment number.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I surely get more than 706 by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because I expected the other person to choose a large investment number so as to get a high payoff.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I can get a larger payoff by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	3	3463	Because of my success at the last two periods. I expected the other person to choose a similar investment number.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because participating in investment is more interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	I chose a number so that the difference between my payoff and the payoff of the other person is as small as possible and the absolute value of my payoff is moderate.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I can get at least 706 by participating in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because 6 would be the average investment number.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to get at least 706 surely.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	Choosing 7 or 8 seems to be the average investment number. I want to get a larger payoff than the other person does.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	Because choosing 6 has been successful many times. My payoffs were reasonably large, and they were larger than the payoffs of the other persons.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	Because by choosing 6, my payoff would be larger than the payoff of the other person, and the absolute value of my payoff would be reasonably large.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	12	11589	The same as the above.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	I chose a number so that the difference between my payoff and the payoff of the other person is as small as possible and the absolute value of my payoff is moderate.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	11	10384	Because by choosing 6, I would obtain a larger payoff than the other would, and the absolute value of my payoff would be reasonably large.

ID Number = 13, Male, Earnings = 2553 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I actually used only the payoff tables 1 and 2.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

2. If my payoff is higher than the payoff of the person I am paired with, I do not care about the absolute value of my payoff, even when the difference between my payoff and the payoff of the person I am paired with is small.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I looked for a number such that I could get a larger payoff than the other person did, and the absolute value of my payoff was reasonable. I decided it based on my past experiences, and continued to choose it.

When the person you were paired with did not participate in investment:

First I invested 0 so as not to give the other person a large payoff. But my payoff was small by doing so. Therefore I chose a number so that the difference between my payoff and the other person's was small, but the absolute value of my payoff was reasonably large.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

It is the best to participate in investment and choose an investment number so that I can get a larger payoff than the other person does and the absolute value of my payoff is moderate.

ID Number = 14, Male, Earnings = 2818 yen

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to understand the method of investment because this is a practice period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	10	5561	I expected the investment number of the other person to be around 8.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I want to get used to the method of investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	I chose the investment number maximizing my payoff.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I am tired.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	1416	

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing an investment number is more interesting.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	12	10877	I expected the other person to choose 8.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Choosing an investment number seems to be more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	Because choosing 9 resulted in a large payoff at the last period.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	10	8951	I want to see what will happen by choosing 9 once more.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	My payoff is the highest when I choose this number.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I did not mean to participate in investment, but I unconsciously did.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	I expected the other person to choose around 7.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I am tired.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because choosing non-participation was a mistake at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	1	2944	

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Choosing an investment number seems to be more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9		2523	For no particular reason.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because the other persons have chosen small investment numbers since a little while ago.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I do not have to choose an investment number.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because many people seem to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because choosing non-participation has been successful recently.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		4	2017	

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Always choosing non-participation is not fun.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	8	7056	I expected the other person to choose about 6.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		For no particular reason.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	I expected the other person to choose around 8.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The other person would be pitiful if I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	6	5515	I expected the other person to choose 11.

ID Number = 14, Male, Earnings = 2818 yen

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Tables 1 and 2 mainly.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I thought the other persons would choose the investment number so that their payoffs become the highest if I did not participate in investment. But because the numbers they actually chose were smaller than that number, I could not get large payoffs as I expected. Therefore I decided to choose an investment number again.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

Based on my expectation on which investment number the other person would choose.

When the person you were paired with did not participate in investment:

I chose my number so as to make my own payoff as large as possible.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I had not been able to find it through the experiment.

ID Number = 15, Male, Earnings = 3316 yen

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To practice on the investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	12	7206	I expected the other person to invest around 12. My investment number that leads to a large payoff when he invests 12 is between 7 and 9.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	6446	I expected the other person to choose a number between 10 and 12. My investment number that leads to a large payoff when he invests such a number is between 7 and 9.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what will happen when I do not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	1815	

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			500	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To avoid the situation ××.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff is maximized by choosing this number.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	9	8209	Because I anticipated that the other person would choose 12.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	15	15694	The same as the above.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	7	6339	The same as the above.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	The same as the above.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	To induce everyone to invest 8.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I would obtain a larger payoff by choosing non-participation than by choosing participation and then investing 6, 7, or 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because there might be a person who takes a similar action as the person I was paired with at the last period did.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	13	12694	Because I expected the other person to choose 6, 7, or 8.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Because I would obtain a larger payoff by choosing non-participation than by choosing participation and then investing 6, 7, or 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		3	1554	

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because there might be a person who takes a similar action as the person I was paired with at the last period did.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	Because my payoff becomes the largest by choosing this number.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11		2658	The same as the above.

ID Number = 15, Male, Earnings = 3316 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

I initially participated in investment to avoid the situation in which neither participated in investment. However, because I thought my payoff would be larger when I did not choose participation, but the other person did, I did not choose participation several times.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I initially expected the investment number of the other person to be between 6 and 12. As rounds advanced, I changed my expectation: I expected it to be 6, 7 or 8 at the middle periods and to be 8 at the latter periods. I invested 6 or 7.

When the person you were paired with did not participate in investment:

I invested 11 so as to maximize my own payoff.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. Invest 6, 7, or 8 if the other person participates in investment, and invest 11 otherwise.
I expected the other person to choose a number between 6 and 12 at the initial periods, 6, 7, or 8 at the middle periods and 8 at the latter periods. Further I expected that the number of persons who do not choose participation and let the other person choose 11 would increase as rounds advance.

ID Number = 16, Male, Earnings = 2682 yen

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To understand the outline of the game.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	6	3520	I expected the other person would also choose around 10.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To prevent the other person from choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	5080	For no particular reason.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		It seems that many people choose a number between 6 and 10.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	15	13	5026	I made the other person happy.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I believe the other person should choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The other person should choose participation and then invest 11.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		The other person should choose 11 this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		2	1186	

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		Everybody is spiteful. However, I still believe the other person should choose 11 this time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		7	4018	

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		My theory seems to be wrong. According to my analysis, a human being cares about not only his payoff, but also the payoff of the other. He prevents the other from obtaining a large payoff unfairly even when he must lose his own payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I no longer conduct myself badly.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	Everybody seems to choose 8 so as to obtain a large payoff. I do not like that the other person obtains a larger payoff than I do. A little revenge.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I will continue to participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The nail that sticks out will get a pounding.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I finally meet a foolish person.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I felt refreshed a little. However, I cannot endure that the other person obtained a larger payoff than I did.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	I decide to choose 7. I expected the other person to choose 7 or 8.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I meet a foolish person. I now understand how the persons I was paired with at periods 2 and 3 felt.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The nail that sticks out will get a pounding.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the reason at period 10.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	4	4281	The same as the above.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	The same as the above.

ID Number = 16, Male, Earnings = 2682 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used Table 1 to examine what my payoff was.
I used Table 1-2 to decide my plan.
I used Table 2-2 to decide how I reacted when the other person chose non-participation.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

When the other person participate in investment: Basically 1 (it is desirable that my payoff is as high, regardless of the payoff of the person I am paired with), but if my payoff did not change much, then 2 (if my payoff is higher than the payoff of the person I am paired with, I do not care about the absolute value of my payoff, even when the difference between my payoff and the payoff of the person I am paired with is small).

When the other person did not participate in investment: the middle between 1 and 4 (if I can make the payoff of the person I am paired with as small as possible, it is fine that my payoff is moderate).

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

First I intended not to participate in investment at all periods. But I was spiritually wakened in the middle of the experiment. See my record sheets for my feelings. I have participated in investment from period 5.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

7.

When the person you were paired with did not participate in investment:

6. Many people would not participate in investment if I permitted the other persons to obtain large payoffs. But I did not like to make my own payoff small.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Participate in investment at all periods. Invest 7 if the other person participates in investment. In this case, I should cho ose 7 or 8, but I like to behave spitefully. Invest 6 if the other person does not participate in investment. The reason is stated above.

ID Number = 17, Male, Earnings = 3039 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to choose a number at the first time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	0	10	3536	I expected the other person to choose a large number at the first time.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to choose a number once more because I made a mistake at practice 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	9	5019	This is a safe number.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The payoff that I can obtain by choosing non-participation would be at most 9112.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	4512	I chose a safe number once more.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I can not earn a large payoff by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	No other choice.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the payoff that I can obtain by choosing non-participation would be at most 9112, I do not have to take a risk.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	12	9	7007	I chose a safe number at the beginning of the experiment.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the reason at period 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I emotionally chose this number so as to prevent the other person from obtaining a large payoff easily, because he chose non-participation.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	Because I expected the other person to choose 10, 11, or 12 safely.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	0	2658	The same as the above.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	The same as the above.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	11	8	6765	The same as the above.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	6	5765	There is a tendency for the other persons to choose small numbers. Therefore, I chose a safer number.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because there is not much to be gained by choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	People might not seriously consider which number they should choose because they would become tired in the middle of the experiment. Therefore I chose a safe number.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I did not give the other person a large payoff so as to prevent choosing non-participation from spreading.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	I expected the other person to take a risk at the middle stages.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I expected that nobody would choose non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	The same as the above.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	7	6481	The payoff I earn by choosing a number between 6 and 8 is not very different from that by choosing 9 when the other person chooses around 9 safely. However, it is not good that choosing a small number will prevail.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	7	6478	I hope the other person to choose a relatively large number at the final stages.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	8	7340	The same as the above.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	12	11480	The same as the above.

ID Number = 17, Male, Earnings = 3029 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used only Payoff Table 1 because I expected that nobody would choose non-participation eventually.
I noticed that the other person would never choose a large number after the actual experiment began.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

6. Others (please specify).

I considered how my choice would affect the other person's payoff and his subsequent behavior in addition to my immediate payoff.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

I did not expect the other person to choose 10, 11, or 12 naively if I chose non-participation.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I expected that the other person would expect me to choose a number so that his payoff and my payoff were between 7,000 and 9,000. Also, both would avoid taking risks. Therefore, both would decide to choose a number between 6 and 11.

When the person you were paired with did not participate in investment:

I chose a number so that the payoff of the other person was between 4,000 and 5,000 in an attempt to prevent him from choosing non-participation thereafter. I did not seek to maximize my immediate payoff because the payoff difference was less than or equal to 400.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

We should participate in investment at all periods and choose 7, 8, or 9. If all of us had good expectations, then we should choose 9. However, because there are several people who sought to obtain large payoffs by choosing small numbers, it would be the best to continue to choose a safe number, 7.

ID Number = 18, Male, Earnings = 3160 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected the other person to participate in investment because this is the first time. Perhaps my payoff would be 6117.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		For no particular reason.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	12	7206	Choosing 11 or 12 seems to be good, and the other person would also choose such a number.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To look at what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		1148	Because by choosing this number, the difference between my payoff and the other person's becomes small and my payoff is not very small. I want to prevent the other person from choosing non-participation at the actual experiment.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	15	9506	I invested 8 at practice 4. I want to compare the results.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I expected the other person to choose participation because the benefit of choosing non-participation is small.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	706	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I learned my lesson at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	14	13576	Because choosing 8 or 9 seems to be safe.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I naively followed my original idea that the benefit of choosing non-participation is small.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	Because I would be angry with the other person if he or she obtained a large payoff.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	Because I have decided to choose 8 or 9 when I participate in investment.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because it seems to be the best choice to participate in investment and then invest 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	11	10173	The same as the above.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	The same as the above.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	The same as the reason at period 4 of the actual experiment.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Because I have decided to choose 8 when I participate in investment.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3		1297	The same as the reason at period 9 of the actual experiment.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	10	9168	The same as the reason at period 10 of the actual experiment.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	10	9168	The same as the above.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		The same as the above.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The same as the above.

ID Number = 18, Male, Earnings = 3160 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I looked at Payoff Table 1.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

The benefit of choosing non-participation was relatively large at the practice periods, but it was small at the actual experiment.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I always chose 8. If the other person chooses 6 or 7, then the payoff I earn by choosing 8 is smaller than that he earns, but it is larger than the payoff I earn by choosing 6 or 7.

When the person you were paired with did not participate in investment:

I almost always chose at most 3. If the other person had enjoyed the benefit of non-participation, then choosing non-participation would have prevailed. Therefore, I chose a small number even though I knew I suffered a loss.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

First I thought that I could obtain 8278 by choosing non-participation if the other person chooses participation, because he would choose 11 so as to maximize his own payoff. However, the other person might choose 0 emotionally. Therefore, it is effective to continue to invest around 8. I thought that it might be good to choose non-participation only at the final period, but I actually did not. Choosing 12 would be good if all people could cooperate.

ID Number = 19, Male, Earnings = 3625 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I could not practice investing if I did not choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	10	11	6214	Everybody seems to have the same idea.

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		For the time being I chose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	16	9	3224	I expected the other person to choose a small number.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To obtain a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		1007	Because I am mad at the other person.

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation	The Reason f
Participation in investment	O ↓	× ↓		To obtain a large payoff.	
			Your Payoff	The Reason for Your Decision on Investment Number	The Reason f
Invest. Num.	6		1007	Because I am mad at the other person.	

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I decide to participate in investment at all periods.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I expected the other person to choose a safe number because this is the first period.

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I could not get a large payoff if I did not choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	24	31155	Because the person I was paired with obtained a larger payoff than I did at the last period. Choosing 7, 8, or 9 would be good.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		My payoff will never decrease by choosing participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	Participate in investment. To teach the other person that choosing non-participation is not good.

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I must participate in investment to obtain a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	To make the difference between my payoff and the other person's as small as possible.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I am sure that the other person will choose participation. He gets used to the experiment because this is the fifth time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	6	5681	I expected the participant to choose a safe number between 7 and 10.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I am sure that the other person will choose participation. He gets used to the experiment because this is the sixth time.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	I do not want to go on a gamble. Many of the persons I was paired with chose 6, 7, or 8.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I could not obtain a large payoff if I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because many of the persons I was paired with chose 7.

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I am sure that the other person will choose participation. He must want a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6	8	7237	I expected the other person to choose 9 or 10 this time, although the number of the persons who chose more than 7 is small.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everybody would choose participation. Choosing participation should be more profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	9	8	7250	I expected the other person to choose a safe number between 7 and 9.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		To obtain a high payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	6		2003	I cannot stand that the other person earns 8278, while my payoff is only 2658 when I choose 11 to maximize my payoff. I wish to earn at least 2000.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		To recover the failure at period 10. Choosing participation would be profitable.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	3	6	4590	Because choosing 8 has become stereotyped recently. I wanted to change it.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because I have already decided to choose participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	9	8271	I expected the other person to choose a safe number.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Only three periods to go. Everybody would participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7	3	3675	Because I expected the other person to choose a safe number between 7 and 9.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wish the other person to choose participation. Choosing participation is more profitable than choosing non-participation.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Because I expected the other person to choose a safe number.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because the other person would not give me a large payoff if I did not participate in investment.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	Everybody would have the same idea. I am sure that the other person will choose 8.

ID Number = 19, Male, Earnings = 3625 yen

(1) Did you understand the rules of the experiment?

2. I have understood the rules from a middle of the experiment:
   From period (2) in Practice.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I decided my investment number mainly by looking at Payoff Tables 1-1 and 1-2. I did not look at Payoff Tables 2 and 3, but instead I used Payoff Table 1-1. I often chose 7 or 8 because these are safe. However, when the other persons chose 7 or 8 in succession, I chose a smaller number to put pressure on the other. Choosing 6 or 9 did not lead to a good outcome. Choosing 9 was good for the other person.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

4. If I can make the payoff of the person I am paired with as small as possible, it is fine that my payoff is moderate.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

1. I always participated in investment.

The reasons for your decisions on participation:

Choosing non-participation is just like strangling myself. I always participated in investment in all practice periods as well as in all periods of the actual experiment. I never wanted to give the other person a good payoff when he did not participate in investment. Be choosing participation, I could choose any investment number even when the other person chose non-participation. However I was mad at the non-participant.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I chose a number between 6 and 9 at most periods. However, when 8 had been chosen in succession, I sometimes chose a small number like 3 to put pressure on the other person. Depending on the sum of my payoffs, I decided whether or not I chose a safe number.

When the person you were paired with did not participate in investment:

I always choose 6 so as to make the difference of my payoff and the other person's small and keep my payoff at least 2000.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

I think it is good to choose 7 or 8 safely at every period. However, if the other person does not participate in investment, then I should make the happiness of the other person as small as possible. My payoff was important, but I did not like the other person to earn a large payoff.

ID Number = 20, Male, Earnings = 2817 yen.

Practice 1

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see what will happen.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		13	6117	

Practice 2

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I did not participate in investment at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	13		1631	Because my payoff is maximized.

Practice 3

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		To see whether or not the other person chooses 13 if the case ×O happens.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		0	500	

Practice 4

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		Because I want to use Payoff Table 1.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	24		500	Because this is a practice period.

Period 1 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I chose non-participation eccentrically because this is the first period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		11	8278	

Period 2 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because both the other person and I could obtain a large payoff.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	Choosing 8 would be safe.

Period 3 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	O ↓		I want to earn the difference of payoff, 1700.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.		6	3244	

Period 4 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I chose participation safely because of my failure at the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	Because I was treated to a painful experience at the last period, I did a similar thing.

Period 5 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I want to earn around 6000 peacefully.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	I could obtain the highest payoff peacefully.

Period 6 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I chose participation once more, because the result at the last period was good.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Let us earn large payoffs together.

Period 7 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	× ↓	× ↓		I chose non-participation this time because I was mad at the other person in the last period.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.			706	

Period 8 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Because of my failure at the last period. I now become composed.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	9	8225	No other choice. This is OK even if the other person chooses 6.

Period 9 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		So far so good. This is safer than seeking to obtain 8278 in the case ×O.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The payoff I obtain by choosing 7 is smaller than that by choosing 8 if the other person chooses 6.

Period 10 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	× ↓		I like such a peaceful life.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	7		2210	I do not like the person who disturbs the peaceful life.

Period 11 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Take it easy. Safety first.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the reason at period 9.

Period 12 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I am tired.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	7	6526	The same as the above.

Period 13 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		I wanted to avoid the painful experience.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	The payoff I obtain by choosing 8 is larger than that by choosing 7 if the other person chooses 6. The difference is 50.

Period 14 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		This is right.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	8	7345	Everybody would choose the same number.

Period 15 of the Actual Experiment

	You	The Person ...	Payoff Table	The Reason for Your Decision on Participation
Participation in investment	O ↓	O ↓		Everybody would choose 8.
			Your Payoff	The Reason for Your Decision on Investment Number
Invest. Num.	8	6	5766	Everybody would choose 8.

ID Number = 20, Male, Earnings = 2817 yen.

(1) Did you understand the rules of the experiment?

1. I have understood the rules from the beginning of the experiment.

(2) Did you understand the three kinds of payoff tables?

1. I understood all three tables.

(3) Did you notice anything about the three kinds of payoff tables? Which tables did you take a look at when you decided your investment number?

I used Payoff Tables 2 and 3 only when I wrote the record sheet. By looking at Payoff Table 1, I thought that nobody would choose more than or equal to 12, and everybody would choose 6, 7, or 8.

(4) This question is to ask your behavior in the actual experiment. Which of the following is closest to your way of thinking on participation and investment decisions?

1. It is desirable that my payoff is as high, regardless of the payoff of the person I am paired with.

(5) This is to ask about your participation behavior in the actual experiment. How often did you participate in investment?

3. I did not participate in investment several times, but the number of periods at which I participated in investment was greater than the number of periods at which I did not.

The reasons for your decisions on participation:

At the early stages I thought choosing non-participation would be more profitable, and the others would scarcely choose non-participation. However, the case in which neither participated in investment happened when I chose non-participation. Moreover, even when I did not participate in investment, but the other person did, he made my payoff small. Therefore I stopped choosing non-participation.

(6) How did you choose your investment number when you participated in investment?

When the person you were paired with participated in investment:

I expected everybody to choose a number between 6 and 9. I chose 8 so as to obtain a large payoff, independent of which number between 6 and 9 the other person chooses.

When the person you were paired with did not participate in investment:

Because I was mad at the other person, I reduced his payoff to about a half of the payoff he would obtain if I chose the number maximizing my own payoff, with keeping my payoff reasonably large.

(7) Finally, what would be the best choice for your participation and investment? What do you think from your experience in the experiment? Why?

Invest 8 at all periods. At first glance choosing non-participation seems to be more profitable. However, the case in which neither participated in investment happened. Moreover, the other person chose a small number so as to make my payoff small, even when I did not participate in investment, but the other person did. Therefore choosing non-participation would be less profitable than choosing participation.