

Appendix A (Not for Publication): Instructions for the Effort-Shock Treatment

INSTRUCTIONS

This is an experiment in the economics of strategic decision making. Various research agencies have provided funds for this research. The instructions are simple. If you follow them closely and make appropriate decisions, you can earn an appreciable amount of money.

The currency used in the experiment is francs. Francs will be converted to U.S. Dollars at a rate of 10 francs to 1 dollar. You have already received a **\$20.00** participation fee (this includes your show-up fee of \$7.00). Your earnings from the experiment will be incorporated into your participation fee. At the end of today's experiment, you will be paid in private and in cash. There are **24** participants are in today's experiment.

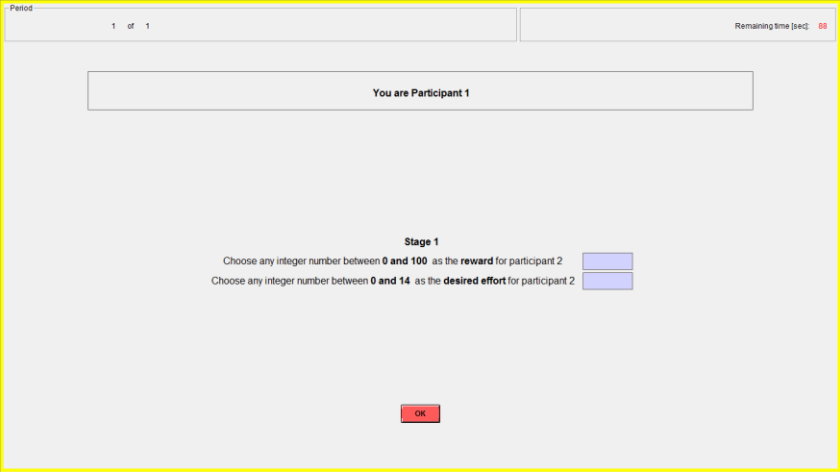
It is very important that you remain silent and do not look at other people's work. If you have any questions, or need assistance of any kind, please raise your hand and an experimenter will come to you. If you talk, laugh, exclaim out loud, etc., you will be asked to leave and you will not be paid. We expect and appreciate your cooperation.

YOUR ROLE ASSIGNMENT

The experiment consists of **10 decision-making periods**. Each period, you will be randomly and anonymously placed into a group which consists of two participants: **participant 1** and **participant 2**. At the beginning of the first period you will be randomly assigned either as participant 1 or participant 2. You will **remain in the same role assignment** throughout the entire experiment. So, if you are assigned as participant 2 then you will stay as participant 2 throughout the entire experiment. Each consecutive period you will be **randomly re-grouped** with another participant of opposite assignment. So, if you are participant 2, each period you will be randomly re-grouped with another participant 1.

STAGE 1

Each period will proceed in three stages. In Stage 1, **participant 1** will choose a **reward** (any integer number between **0 and 100**) and a **desired effort** (any integer number between **0 and 14**) for participant 2. An example of Stage 1 decision screen for participant 1 is shown below.

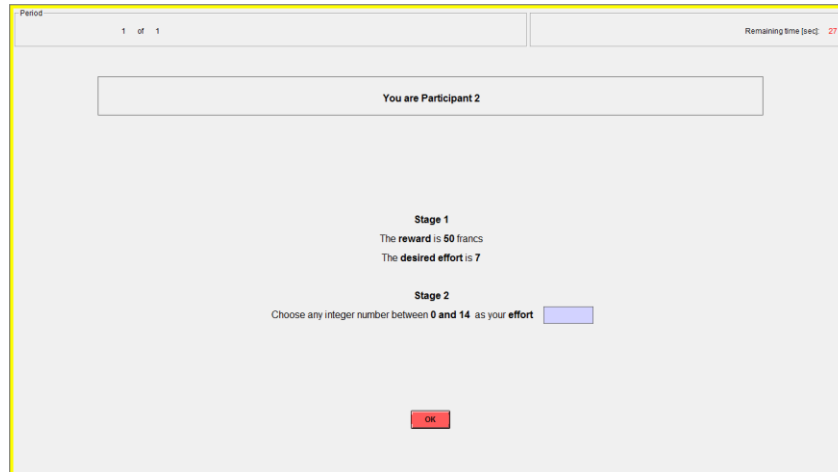


The screenshot shows a web-based interface for a decision screen. At the top, it says "Period 1 of 1" and "Remaining time (sec) 00". Below that, a box says "You are Participant 1". Underneath, it says "Stage 1" and provides instructions: "Choose any integer number between 0 and 100 as the reward for participant 2" and "Choose any integer number between 0 and 14 as the desired effort for participant 2". There are two input fields, one for the reward and one for the desired effort. At the bottom, there is a red "OK" button.

[Stage 1 decision screen]

STAGE 2

The computer will display to participant 2 the reward and the desired effort chosen by participant 1. Then in Stage 2, **participant 2** will choose an **effort** level (any integer number between **0 and 14**). An example of Stage 2 decision screen for participant 2 is shown below.



[Stage 2 decision screen]

For each **effort** level chosen by participant 2 there is an associated **cost of effort**. The cost of effort can be found in the following table:

Effort	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
cost of effort	0	1	2	5	8	13	18	25	32	41	50	61	72	85	98

Note that as effort rises from 0 to 14, costs rise exponentially. The cost of effort can be also calculated using the following formula (and rounding the number to the nearest highest integer):

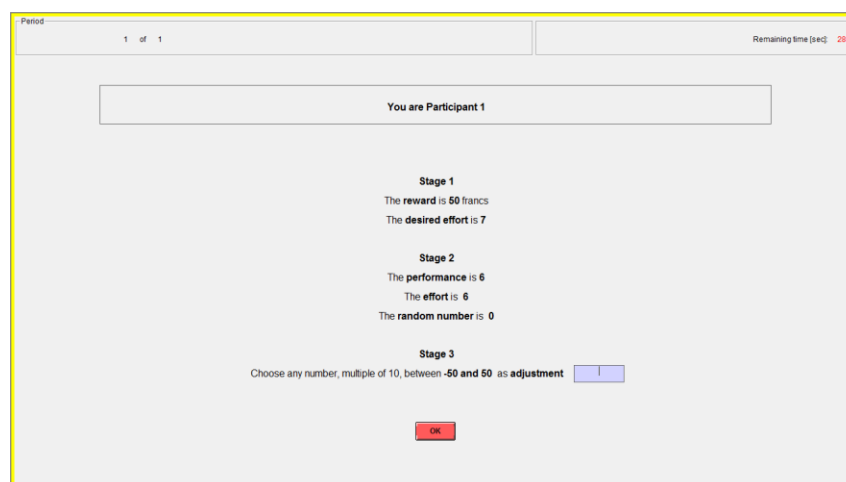
$$\text{participant 2's cost of effort} = \frac{(\text{effort})^2}{2}$$

STAGE 3

After participant 2 chooses the effort level, the computer will add to effort a **random number** to determine the **performance** of participant 2:

$$\text{participant 2's performance} = \text{effort} + \text{random number}$$

The random number chosen by the computer can take a value of **-2, -1, 0, 1, or 2**. Each number is equally likely to be drawn. After the computer makes a draw of a random number, it will display to participant 1 the **performance** of participant 2, as well as the **effort** chosen by participant 2 and the **random number** chosen by the computer. Then in the third stage, **participants 1** will choose an **adjustment** level. The adjustment level can be any number, multiple of 10, between **-50 and 50**. An example of Stage 3 decision screen for participant 1 is shown below.



[Stage 3 decision screen]

For each **adjustment** level chosen by participant 1 there is an associated **cost of adjustment**. The cost of adjustment can be found in the following table:

adjustment	-50	-40	-30	-20	-10	0	10	20	30	40	50
cost of adjustment	5	4	3	2	1	0	1	2	3	4	5

EARNINGS OF PARTICIPANTS 1 AND 2

The earnings of participant 1 depend on the **reward** chosen by participant 1 in the first stage, the **performance** of participant 2 in the second stage and the **adjustment** chosen by participant 1 in the third stage. Specifically, the participant 1's earnings are calculated by the following formula:

$$\begin{aligned} \text{participant 1's earnings} &= 10 * (\text{performance}) - (\text{reward}) - (\text{cost of adjustment}) = \\ &= 10 * (\text{effort} + \text{random number}) - (\text{reward}) - (\text{cost of adjustment}) \end{aligned}$$

Note that higher participant 2's effort implies higher participant 2's performance, and thus higher participant 1's earnings. On the other hand, the higher reward or the higher cost of adjustment implies lower participant 1's earnings.

The earnings of participant 2 depend on the **reward** chosen by participant 1 in the first stage, the **effort** chosen by participant 2 in the second stage and the **adjustment** chosen by participant 1 in the third stage. Specifically, the participant 2's earnings are calculated by the following formula:

$$\text{participant 2's earnings} = (\text{reward}) - (\text{cost of effort}) + (\text{adjustment})$$

Note that higher reward chosen by participant 1 implies higher participant 2's earnings. On the other hand, the higher effort implies lower participant 2's earnings. If participant 1 chooses a positive adjustment level for participant 2 then participant 2's earnings increase by that adjustment level. However, if participant 1 chooses a negative adjustment level then participant 2's earnings decrease by that adjustment level.

Example 1

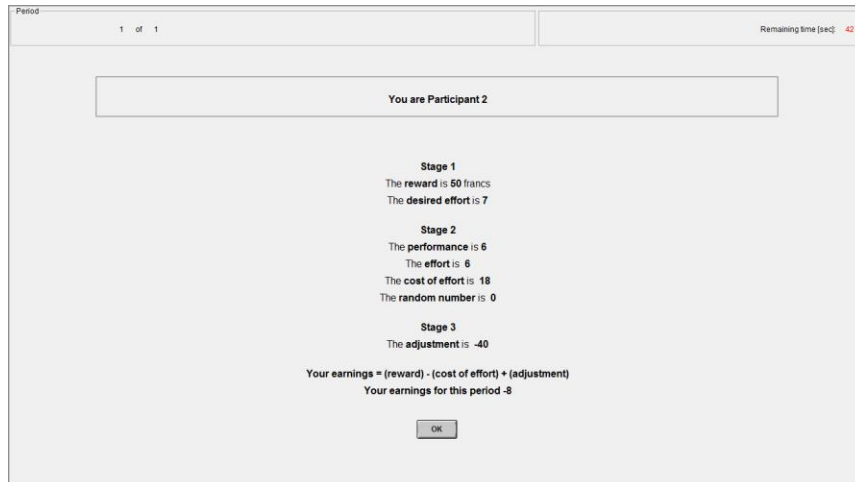
Assume the following scenario. In the first stage, participant 1 chooses a reward of 50 and a desired effort of 7. In the second stage, participant 2 chooses an effort of 6. Then the computer randomly selects 2 as a random number, so the performance of participant 2 is 8 (6+2). Then the computer displays to participant 1 that participant 2's performance is 8, participant 2's effort is 6 and the random number chosen by the computer is 2. After observing this information, in the third stage, participant 1 chooses an adjustment of -40. Therefore, participant 1's earnings = $10 * 8 - 50 - 4 = 26$, since participant 2's performance is 8, the reward is 50, and the cost of adjustment of -40 is 4. Finally, participant 2's earnings = $50 - 18 - 40 = -8$, since the reward is 50, the cost of effort of 6 is 18, and the adjustment is -40.

Example 2

Assume the following scenario. In the first stage, participant 1 chooses a reward of 40 and a desired effort of 6. In the second stage, participant 2 chooses an effort of 9. Then the computer randomly selects -2 as a random number, so the performance of participant 2 is 7 (9-2). Then the computer displays to participant 1 that participant 2's performance is 7, participant 2's effort is 9 and the random number chosen by the computer is -2. After observing this information, in the third stage, participant 1 chooses an adjustment of 30. Therefore, participant 1's earnings = $10 * 7 - 40 - 3 = 27$, since participant 2's performance is 7, the reward is 40, and the cost of adjustment of 30 is 3. Finally, participant 2's earnings = $40 - 41 + 30 = 29$, since the reward is 40, the cost of effort of 9 is 41, and the adjustment is 30.

END OF THE PERIOD

At the end of each period, the computer will calculate individual earnings and display to both participants the following information: the reward chosen by participant 1, the desired effort chosen by participant 1, the performance of participant 2, the effort chosen by participant 2, the random number chosen by the computer, the adjustment chosen by participant 1, as well as individual earnings for that period. An example of the outcome screen is shown below.



[Outcome screen]

Once your earnings are displayed on the outcome screen as shown below you should record your earnings for the period on your **Personal Record Sheet** under the appropriate heading.

IMPORTANT NOTES

Each period, you will be randomly and anonymously placed into a group which consists of two participants: **participant 1** and **participant 2**. At the beginning of the first period you will be randomly assigned either as participant 1 or participant 2. You will **remain in the same role assignment** throughout the entire experiment. So, if you are assigned as participant 2 then you will stay as participant 2 throughout the entire experiment. Each consecutive period you will be **randomly re-grouped** with the other participant of opposite assignment. So, if you are participant 2, each period you will be randomly re-grouped with another participant 1.

Each period will proceed in three stages. In Stage 1, **participant 1** will choose a **reward** and a **desired effort** for participant 2. The computer will display to participant 2 the reward and the desired effort chosen by participant 1. Then in Stage 2, **participant 2** will choose an **effort** level. For each **effort** level chosen by participant 2 there is an associated **cost of effort**. After participant 2 chooses the effort level, the computer will add to effort a **random number** to determine the **performance** of participant 2. Then the computer will display to participant 1 the **performance** of participant 2, as well as the **effort** chosen by participant 2 and the **random number** chosen by the computer. Then in Stage 3, **participant 1** will choose an **adjustment** level. Finally, at the end of each period, the computer will calculate individual earnings and display both participants all relevant information.

Remember you have already received a **\$20.00** participation fee. In the experiment, depending on a period, you may receive either positive or negative earnings. At the end of the experiment we will randomly select **1 out of 10** periods for actual payment and convert them to a U.S. dollar payment. If the earnings are negative, we will subtract them from your total earnings. If the earnings are positive, we will add them to your total earnings.

Are there any questions?

Cost of Effort Table

For each **effort** level chosen by participant 2 there is an associated **cost of effort**.

effort	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
cost of effort	0	1	2	5	8	13	18	25	32	41	50	61	72	85	98

Cost of Adjustment Table

For each **adjustment** level chosen by participant 1 there is an associated **cost of adjustment**.

adjustment	-50	-40	-30	-20	-10	0	10	20	30	40	50
cost of adjustment	5	4	3	2	1	0	1	2	3	4	5

Appendix B (Not for Publication): IR/IC Contracts

The analysis in Section 4 is based on all contracts. Here, we focus on the IR/IC contracts. The majority of contracts observed in our experiment satisfy IR/IC (62%). The number of contracts satisfying IR/IC is very similar across the three treatments (64% in Effort-Only, 59% in Outcome-Only and 62% in Effort-Shock). Table B1 provides the summary statistics across all three treatments.

When examining adjustments in stage 3, we find no significant difference between treatments: Effort-Only versus Outcome-Only (0.26 versus -0.62; p-value = 0.11, $n_1 = 9$, $n_2 = 9$), Effort-Only versus Effort-Shock (0.26 versus -0.51; p-value = 0.20, $n_1 = 9$, $n_2 = 9$), and Outcome-Only versus Effort-Shock (-0.62 versus -0.51; p-value = 0.96, $n_1 = 9$, $n_2 = 9$).

When examining effort in stage 2, we find that the average unconditional effort in the Effort-Only treatment is higher than in the Outcome-Only treatment (6.86 versus 5.08; p-value < 0.01, $n_1 = 9$, $n_2 = 9$) and the Effort-Shock treatment (6.86 versus 5.07; p-value < 0.01, $n_1 = 9$, $n_2 = 9$). On the other hand, the average effort is not different between the Outcome-Only and Effort-Shock treatments (5.08 versus 5.07; p-value = 0.99, $n_1 = 9$, $n_2 = 9$). When examining the probability of effort exceeding the desired effort, we find that it is significantly lower in the Effort-Only treatment than in the Outcome-Only treatment (0.07 versus 0.19; p-value = 0.03, $n_1 = 9$, $n_2 = 9$), but there is no significant difference between the Effort-Only and Effort-Shock treatments (0.07 versus 0.14; p-value = 0.28, $n_1 = 9$, $n_2 = 9$) or between the Outcome-Only and Effort-Shock treatments (0.19 versus 0.14; p-value = 0.59, $n_1 = 9$, $n_2 = 9$). When examining the probability of agents choosing efforts exactly specified by the contract, we find that it is significantly higher in the Effort-Only treatment than in the Outcome-Only treatment (0.41 versus 0.12; p-value < 0.01, $n_1 = 9$, $n_2 = 9$) and the Effort-Shock treatment (0.41 versus 0.23; p-value = 0.03, $n_1 = 9$, $n_2 = 9$). There is no difference between the Outcome-Only and Effort-Shock treatments (0.12 versus 0.23; p-value = 0.10, $n_1 = 9$, $n_2 = 9$), although the difference nears statistical significance.

When examining wage and desired effort in stage 1, we find that they are the highest in the Effort-Only treatment. The average wage in the Effort-Only treatment is significantly higher than in the Effort-Shock treatment (46.27 versus 38.87; p-value = 0.05, $n_1 = 9$, $n_2 = 9$) and Outcome-Only treatment (46.27 versus 37.36; p-value = 0.02, $n_1 = 9$, $n_2 = 9$). Similarly, the average desired effort is higher in the Effort-Only treatment than in the Effort-Shock treatment (8.13 versus 6.91; p-value < 0.01, $n_1 = 9$, $n_2 = 9$) and the Outcome-Only treatment (8.13 versus 6.65; p-value < 0.01, $n_1 = 9$, $n_2 = 9$). On the other hand, wage and desired effort are not different between the Outcome-Only and Effort-Shock treatments (p-values = 0.89 and 0.63, respectively). As a consequence of higher wage and higher effort, the Effort-Only treatment generates significantly higher payoff to the principal than the Outcome-Only treatment (20.39 versus 9.17; p-value = 0.03, $n_1 = 9$, $n_2 = 9$) and the Effort-Shock treatment (20.39 versus 12.09; p-value =

0.05, $n_1 = 9$, $n_2 = 9$). Yet, the principal's payoff is not significantly different between the Outcome-Only and Effort-Shock treatments (9.17 versus 12.09; p-value = 0.57, $n_1 = 9$, $n_2 = 9$). When comparing payoffs of agents, we find no significant differences between the three treatments (all p-values > 0.45).

Table B1: Summary Statistics: IR/IC Contracts.

Treatment	Wage	Desired Effort	Effort	Outcome	Adjustment	Principal's Payoff	Agent's Payoff	Total Welfare
<i>Effort-Only</i>	46.27 (2.57)	8.13 (0.24)	6.86 (0.34)	6.86 (0.34)	0.26 (0.38)	20.39 (2.89)	18.91 (1.68)	39.30 (1.48)
<i>Effort-Shock</i>	38.87 (2.56)	6.91 (0.33)	5.07 (0.30)	4.98 (0.33)	-0.51 (0.27)	9.17 (3.75)	20.27 (2.06)	29.44 (2.19)
<i>Outcome-Only</i>	37.36 (2.06)	6.65 (0.34)	5.08 (0.49)	5.12 (0.48)	-0.62 (0.24)	12.09 (3.65)	19.50 (2.10)	31.58 (2.33)

Standard errors in parenthesis (based on 9 independent observations).

Appendix C (Not for Publication): Non-IR/IC Contracts

The analysis in Section 4 is based on all contracts. Here, we focus on the non-IR/IC contracts. Examining the non-IR/IC contracts, we find that 36% of contracts in the Effort-Only, 41% in the Outcome-Only and 38% in the Effort-Shock treatment can be characterized as non-IR/IC contracts. The vast majority of the non-IR/IC contracts (91%, 744 out of 822) are the ones where, conditional on contract being exactly fulfilled, the agent is expected to receive a negative payoff (i.e., $w - c(e) < 0$). We refer to these contracts as the “stingy” contracts, since they do not satisfy the incentive compatibility requirements for the agent. The rest of the non-IR/IC contracts (9%, 78 out of 822) are the ones where the principal is expected to receive a negative payoff (i.e., $10e - w < 0$). We refer to these contracts as the “generous” contracts, since in such contracts the principal offers very generous wages relatively to the desired effort, although they are not individually rational. Table C1 provides the summary statistics across all three treatments, using “stingy” contracts (top part) and “generous” contracts (bottom part).

Examining first the 78 generous contracts where the principal is expected to make a negative payoff (the bottom panel of Table C1), we find that principals make negative payoffs in all three treatments. Due to the small number of such contracts there are only 5 independent observations in the Effort-Only treatment, 4 in the Effort-Shock treatment, and 6 in the Outcome-Only treatment. Although a full statistical analysis is not appropriate with such a small (and very noisy) number of independent observations, it appears that when the principals offer “generous” contracts, the agents reciprocate. The effort is about 2 units higher than the desired effort, which is in sharp contrast to the IR/IC contracts in Table 1. However, this reciprocation by agents is not nearly enough to compensate for very generous wage offers by principals. As a consequence, principals make negative payoffs, while agents make positive and very high payoffs. It is important to emphasize that such behavior by principals is unlikely to be caused by mistakes. The 78 generous contracts are offered by 52 independent subjects. Moreover 34 of these contracts are offered in the last five periods of the experiment. A possible explanation for generous contracts is that principals use such contracts hoping that agents will show significant reciprocity. While we cannot rule out the possibility that generous contracts are caused by mistakes (although it is unlikely), we can rule out the possibility that these contracts offer “efficiency wages” – aimed at keeping agents happy in the long-run – since relationships are one-shot.

When examining the 744 stingy contracts where the agent is expected to make a negative payoff (the top panel of Table C1), we find that in all three treatments agents make significantly positive payoffs (based on the Wilcoxon signed-rank test, separately for each treatment, all p-values are less than 0.01). This is mainly because the effort is about 5-6 units below the desired effort (which is in sharp contrast to the generous contracts in Table C1 and the IR/IC contracts in Table 1). Interestingly, on average,

principals do not punish such behavior. One reason for this is that principals make very substantial payoffs even when agents do not fully fulfill the terms of the stingy contract. In fact, the principals offering stingy contracts on average receive very similar payoffs than the principals offering IR/IC contracts (based on the Wilcoxon signed-rank test, separately for each treatment, all p-values are greater than 0.20). Agents, on the other hand, receive significantly lower payoffs under the stingy contracts than under the IR/IC contracts (based on the Wilcoxon signed-rank test, separately for each treatment, all p-values are less than 0.02). These two findings can explain why the majority of contracts satisfy IR/IC, yet some principals still choose to offer stingy contracts. On the one hand, principals should be indifferent between offering the IR/IC and stingy contracts, since the expected payoff is not different between the two. So, we should observe both types of the contacts. On the other hand, IR/IC contracts provide significantly higher payoffs to the agents, and thus benevolent principals should choose the IR/IC contracts more often than the stingy contracts.

Table C1: Summary Statistics: Non-IR/IC Contracts.

Treatment	Wage	Desired Effort	Effort	Outcome	Adjustment	Principal's Payoff	Agent's Payoff	Total Welfare
<i>Stingy Contracts</i>								
<i>Effort-Only</i>	30.31 (3.94)	10.68 (0.51)	5.35 (0.75)	5.35 (0.75)	-0.08 (0.41)	21.23 (4.96)	9.42 (2.37)	30.64 (3.45)
<i>Effort-Shock</i>	23.00 (3.92)	9.12 (0.47)	3.83 (0.50)	3.66 (0.49)	0.22 (0.31)	12.44 (4.17)	9.49 (3.05)	21.93 (3.04)
<i>Outcome-Only</i>	21.21 (4.03)	10.38 (0.51)	4.00 (0.56)	4.09 (0.53)	-0.50 (0.30)	18.23 (3.95)	7.62 (3.02)	25.85 (3.24)
<i>Generous Contracts</i>								
<i>Effort-Only</i>	54.00 (8.27)	2.20 (0.80)	4.00 (0.95)	4.00 (0.95)	-2.00 (1.22)	-16.00 (11.53)	42.00 (9.82)	26.00 (4.16)
<i>Effort-Shock</i>	44.88 (6.71)	1.88 (0.72)	3.44 (0.86)	4.19 (1.12)	-0.94 (0.60)	-4.06 (8.06)	36.50 (5.30)	32.44 (9.80)
<i>Outcome-Only</i>	57.47 (6.46)	2.96 (0.33)	5.44 (0.88)	5.61 (1.02)	0.44 (0.60)	-3.07 (13.62)	35.38 (11.62)	32.31 (3.83)

Standard errors in parenthesis (based on 9 independent observations). In the bottom panel of the table there are only 5 independent observations in the Effort-Only treatment, 4 in the Effort-Shock treatment, and 6 in the Outcome-Only treatment.

Appendix D (Not for Publication): Non-IR/IC Contracts

Table D1 shows the estimation results of different panel models where individual subjects represent the random effects, and the standard errors are clustered at the single re-matching group level. The dependent variable in all specifications is the *adjustment* and the independent variables are an inverse of *period*, *wage*, *effort – desired effort* (in *Effort-Only* and *Effort-Shock*) and *outcome – desired effort* (in *Outcome-Only*), as well as treatment dummies. All regressions indicate no significant difference in adjustment level between the three treatments (see the treatment dummies).

Table D1: Panel Models of Adjustments.

Specification	(1)	(2)	(3)
Treatments	<i>Effort-Only & Effort-Shock</i>	<i>Effort-Only & Outcome-Only</i>	<i>Effort-Shock & Outcome-Only</i>
Dependent variable	<i>adjustment</i>	<i>adjustment</i>	<i>adjustment</i>
<i>Effort-Only</i> [Effort-Only treatment dummy]	0.28 (0.42)	0.62 (0.41)	
<i>Outcome-Only</i> [Outcome-Only treatment dummy]			-0.34 (0.25)
<i>wage</i> [wage]	-0.01** (0.00)	-0.01 (0.01)	-0.01** (0.00)
<i>effort – desired effort</i> [effort gap]	0.30*** (0.05)		
<i>outcome – desired effort</i> [outcome gap]		0.28*** (0.05)	0.22*** (0.04)
<i>period</i> [inverse period]	-0.81*** (0.30)	-0.69* (0.41)	-0.36 (0.32)
<i>constant</i> [constant term]	1.24*** (0.37)	0.80* (0.44)	0.87*** (0.32)
<i>N</i>	720	720	720
<i>Clusters</i>	18	18	18

* significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parenthesis are clustered at the group level.

Table D2 shows the estimation results of different panel models where individual subjects represent the random effects, and the standard errors are clustered at the single re-matching group level. The dependent variable in all specifications is the *effort* and the independent variables are an inverse of *period*, *wage*, and *desired effort*, as well as treatment dummies. The regression results corroborate our main findings (see the treatment dummies): effort is greater in *Effort-Only* than in the other two treatments, but there is no difference between *Effort-Shock* and *Outcome-Only* treatments.

Table D2: Panel Models of Effort.

Specification	(1)	(2)	(3)
Treatments	<i>Effort-Only & Effort-Shock</i>	<i>Effort-Only & Outcome-Only</i>	<i>Effort-Shock & Outcome-Only</i>
Dependent variable	<i>effort</i>	<i>effort</i>	<i>effort</i>
<i>Effort-Only</i> [Effort-Only treatment dummy]	0.95** (0.41)	1.03** (0.49)	
<i>Outcome-Only</i> [Outcome-Only treatment dummy]			-0.03 (0.39)
<i>wage</i> [wage]	0.08*** (0.01)	0.08*** (0.01)	0.07*** (0.01)
<i>desired effort</i> [desired effort]	0.09** (0.04)	0.09** (0.05)	0.07 (0.04)
<i>period</i> [inverse period]	-0.30 (0.40)	-0.43 (0.32)	0.26 (0.42)
<i>constant</i> [constant term]	1.30*** (0.37)	1.49*** (0.45)	1.82*** (0.42)
<i>N</i>	720	720	720
<i>Clusters</i>	18	18	18

* significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parenthesis are clustered at the group level.

Table D3 shows the estimation results of different panel models where individual subjects represent the random effects, and the standard errors are clustered at the single re-matching group level. The dependent variable in all specifications is the *wage* and the independent variables are an inverse of *period*, and treatment dummies. The regression results corroborate our main findings (see the treatment dummies): wage is greater in Effort-Only than in the other two treatments, but there is no difference between Effort-Shock and Outcome-Only treatments.

Table D3: Panel Models of Wage.

Specification	(1)	(2)	(3)
Treatments	<i>Effort-Only & Effort-Shock</i>	<i>Effort-Only & Outcome-Only</i>	<i>Effort-Shock & Outcome-Only</i>
Dependent variable	<i>wage</i>	<i>wage</i>	<i>wage</i>
<i>Effort-Only</i> [Effort-Only treatment dummy]	7.69* (4.26)	7.29* (3.83)	
<i>Outcome-Only</i> [Outcome-Only treatment dummy]			0.40 (3.65)
<i>period</i> [inverse period]	-0.40 (3.12)	-2.04 (3.09)	2.24 (3.45)
<i>constant</i> [constant term]	33.57*** (3.43)	34.45*** (2.92)	32.80*** (3.46)
<i>N</i>	720	720	720
<i>Clusters</i>	18	18	18

* significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parenthesis are clustered at the group level.

Table D4 shows the estimation results of different panel models where individual subjects represent the random effects, and the standard errors are clustered at the single re-matching group level. The dependent variable in all specifications is the *desired effort* and the independent variables are an inverse of *period*, and treatment dummies. The regression results corroborate our main findings (see the treatment dummies): wage is greater in Effort-Only than in the other two treatments, but there is no difference between Effort-Shock and Outcome-Only treatments.

Table D4: Panel Models of Desired Effort.

Specification	(1)	(2)	(3)
Treatments	<i>Effort-Only & Effort-Shock</i>	<i>Effort-Only & Outcome-Only</i>	<i>Effort-Shock & Outcome-Only</i>
Dependent variable	<i>desired effort</i>	<i>desired effort</i>	<i>desired effort</i>
<i>Effort-Only</i>	1.31***	1.32***	
[Effort-Only treatment dummy]	(0.44)	(0.38)	
<i>Outcome-Only</i>			-0.01
[Outcome-Only treatment dummy]			(0.41)
<i>period</i>	-1.46***	-1.57**	-1.11*
[inverse period]	(0.54)	(0.70)	(0.60)
<i>constant</i>	8.06***	8.09***	7.96***
[constant term]	(0.41)	(0.38)	(0.42)
<i>N</i>	720	720	720
<i>Clusters</i>	18	18	18

* significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parenthesis are clustered at the group level.