# Sorting, Incentives and Performance

Figures and Tables only
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**Abstract**

In this paper we provide controlled experimental evidence on the interaction of incentive schemes, sorting decisions, and performance. In a first sequence of the experiment, all subjects perform a real effort task under a piece rate regime. They can then choose to work either under a fixed payment scheme or, depending on the treatment, under a piece rate scheme (piece rate treatment), under a tournament incentives (tournament treatment), or team compensation (team treatment). In all three treatments, subjects are then going through a series of other treatments to elicit social preferences and risk attitudes. In addition, we collect questionnaire data on effort, self-assessment, risk attitudes, IQ, socioeconomic characteristics, and personality. Our main findings are as follows: First, output is much higher in the variable pay schemes (piece rate, tournament, and team) compared to the fixed wage schemes. Second, this difference is only in part driven by changes in effort in response to incentives. More important for the output differences is the sorting of subjects: the higher individual-specific productivity is, the more likely a subject is to self-select into a variable pay schemes. Third, reported effort is significantly higher in all variable pay conditions than in the fixed wage condition. Moreover, subjects report that they are more stressed if they work in a variable pay scheme. Fourth, in addition to productivity, risk attitudes and self-assessment play an important role in the sorting decision, in particular for the decision to work under tournament incentives. As a consequence, subjects in the tournament are less risk averse and think they perform relatively better than others, compared to the subjects who selected themselves into the fixed wage condition. Fifth, there is some weak evidence that women as well as people endowed with social preferences have a tendency to choose the fixed wage scheme. Subjects also differ with respect to their personality and work attitudes. Our results demonstrate that the choice of an incentive scheme exhibits not only particular incentive effects but also attracts particular types of workers, e.g., with respect to their productivity, risk attitudes or self-confidence. The data also show that assessing the incentive effects without taking self-selection into account leads to utterly wrong conclusions. Methodologically the paper shows that experiments cannot only be used to rule out selection via random assignment but also to study selection in a controlled way.

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**Figure 1:** Design of the Experiment

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Productivity | Productivity | Productivity | Effort questions | Relative self-assessment | Sorting decision | Sorting with different fixed payment alternatives | Working time | Effort questions | Social preferences | Risk preferences | Question-naires |
| Calculate one problem of difficulty level 4 as fast as possible<br>*Productivity_1* | Calculate one problem of difficulty level 4 as fast as possible (paid)<br>*Productivity_2* | Piece-Rate with 10 P per correct answer<br>5 minutes<br>*Productivity_3* | How much effort have you exerted?<br>How stressed did you feel?<br>How exhausted did you get? | How many people (out of 20) solved more question better than you did?<br>Paid correct: 100 P +/-1: 50 P | a) **Piece-Rate:** 10 P per correct answer<br>b) **Tournament:** Winner is who has more correct answers Winner gets 1300P Loser gets 0P<br>c) **Team:** (Sum of output) *10 divided by 2<br>vs.<br>**Fixed Payment:** 400 P independent of output | Varying the fixed payment alternatives | 10 minutes<br>Piece-Rate, Tournament, Team or Fixed Payment | How much effort have you exerted?<br>How stressed did you feel?<br>How exhausted did you get? | 2-player, sequential trust game<br>Endowment of 120<br>Transfer of 1st mover tripled Contingent response method for 2nd mover Role reversal No information | Choice between L(400, 0; 0.5) and 15 safe options 25, 50, ..., 375<br>One alternative randomly chosen | Socioeconomics<br>Math and high-school grades<br>Risk-preference questions<br>Verbal IQ-test Attitudes"Big Five"<br>"Machiavelli" |

**Figure 2:** Output of Self-Selected Subjects in Different Compensation Schemes
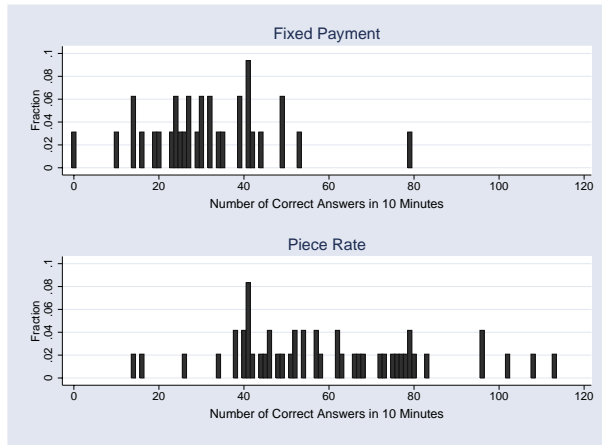


(a) Piece Rate Treatment
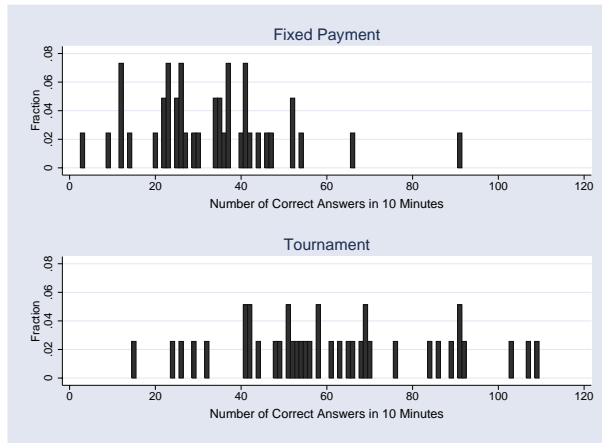


(b) Tournament Treatment
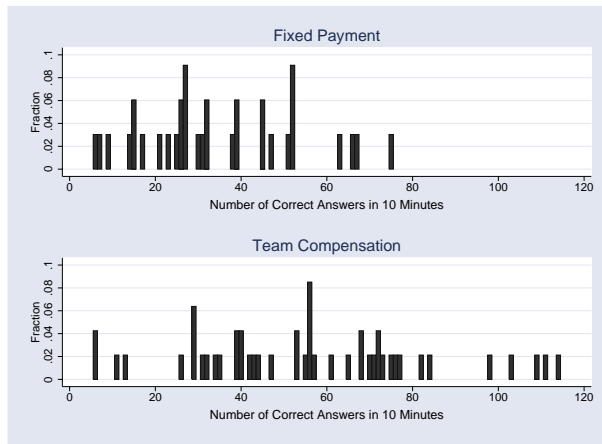


(c) Team Treatment

*Notes:* Each panel of the figure plots, for a particular treatment, two histograms of individual output (measured as the number of correct answers during the total working time of ten minutes), one for each of the self-selected groups of subjects: The upper histogram shows the output distribution of workers who selected into the fixed payment contract, and the lower histogram of a panel shows the output distribution of workers who selected into the variable payment contract. Panel (a) shows output histograms for the piece rate treatment, Panel (b) those that arose in the of the tournament treatment, and Panel (c) plots output histograms from the team treatment.

**Figure 3:** Performance and Task Difficulty
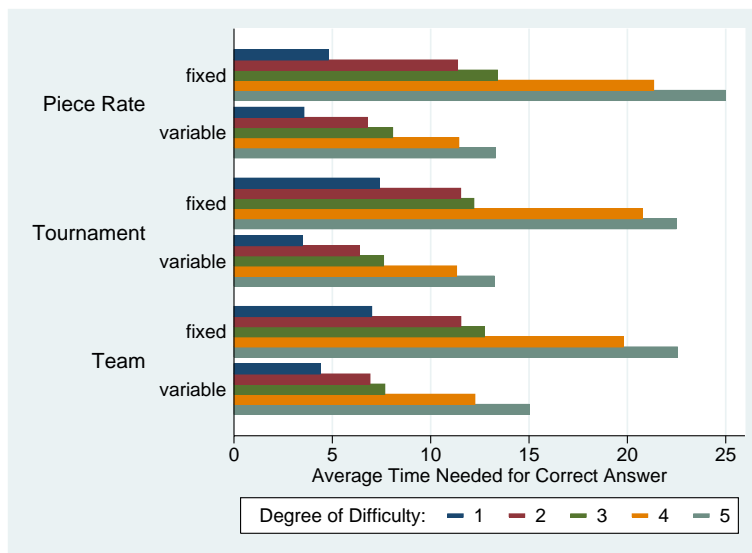


*Notes:* The figure shows, for each treatment, how much time (in seconds) subjects working in a particular self-selected regime need on average to solve a question of a given degree of difficulty.

**Figure 4:** Productivity of Subjects before Self-Selection Into Incentive Contract
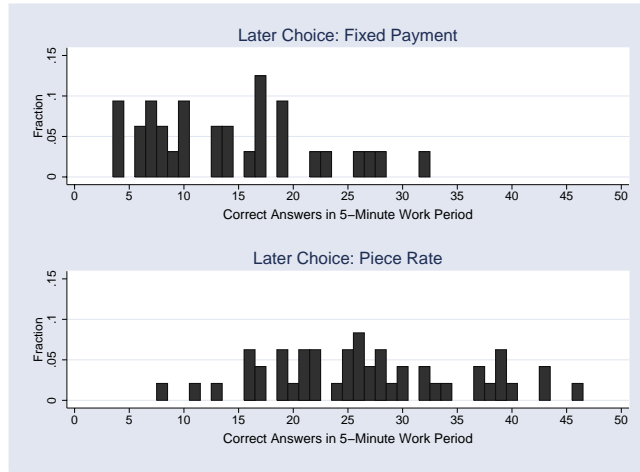


(a) Piece Rate Treatment
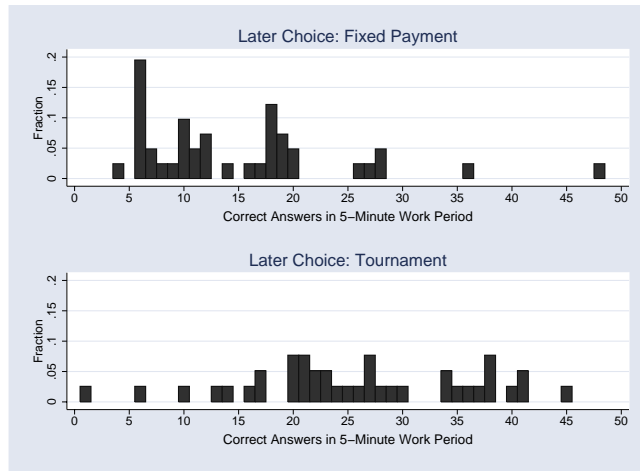


(b) Tournament Treatment
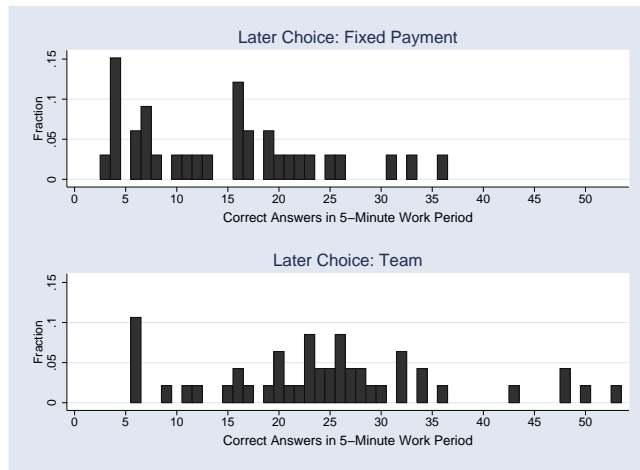


(c) Team Treatment

*Notes:* Each panel of the figure plots histograms of Productivity Indicator 3, which was elicited in step 3 of the experiment and which measures the number of correct answers during a 5-minute work period. The upper histogram always shows the distribution of individual productivity for subjects who subsequently chose for the fixed payment alternative, while the lower histogram of a panel always shows the productivity distribution among subjects who subsequently preferred the variable payment alternative. Panel (a) refers to the piece rate treatment, and Panel (b) and Panel (c) to the tournament treatment and team treatment respectively.

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**Table 1:** Productivity Differences

*(a) Median Productivity*

| Productivity: | Piece rate treatment | | | Tournament treatment | | | Team treatment | | |
|---|---|---|---|---|---|---|---|---|---|
| | Piece rate (Median) | Fixed pay (Median) | Median test (p-value) | Tournament (Median) | Fixed pay (Median) | Median test (p-value) | Team (Median) | Fixed pay (Median) | Median test (p-value) |
| Indicator 1 (time needed in seconds) | 8.00 | 28.50 | 0.003 | 11.00 | 26.00 | 0.002 | 13.00 | 24.00 | 0.173 |
| Indicator 2 (time needed in seconds) | 7.00 | 20.50 | 0.000 | 6.00 | 18.00 | 0.000 | 9.00 | 22.00 | 0.002 |
| Indicator 3 (correct answers) | 26.00 | 13.50 | 0.000 | 25.00 | 12.00 | 0.000 | 24.00 | 16.00 | 0.001 |

*(b) Distribution of Productivity Measured by Indicator 1 and Indicator 2*

| Productivity: | Piece rate treatment | | | | Tournament treatment | | | | Team treatment | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Indicator 1 | | Indicator 2 | | Indicator 1 | | Indicator 2 | | Indicator 1 | | Indicator 2 | |
| | Piece Rate | Fixed pay | Piece rate | Fixed pay | Tournament | Fixed pay | Tournament | Fixed pay | Team | Fixed pay | Team | Fixed pay |
| Fraction answering in | | | | | | | | | | | | |
| 0 to 10 sec. | 60.42 | 18.75 | 70.83 | 28.12 | 48.72 | 17.07 | 79.49 | 21.95 | 36.17 | 24.24 | 57.45 | 21.21 |
| 11 to 20 sec. | 18.75 | 21.88 | 12.5 | 21.88 | 23.08 | 19.51 | 2.56 | 31.71 | 25.53 | 18.18 | 19.15 | 24.24 |
| 21 to 30 sec. | 12.5 | 18.75 | 4.17 | 18.75 | 12.82 | 19.51 | 10.26 | 9.76 | 10.64 | 21.21 | 2.13 | 18.18 |
| more than 30 sec. | 8.33 | 40.62 | 12.5 | 31.25 | 15.38 | 43.9 | 7.69 | 36.59 | 27.66 | 36.36 | 21.28 | 36.36 |

*Notes:* Panel (a) of the table shows the median of each productivity indicator for both subgroups in all three treatments. Productivity Indicators 1 and 2 are elicited in steps 1 and 2 respectively and measure the amount of time that a person needed to solve a question with degree of difficulty 4. No monetary incentives were offered in step 1, while subjects were paid for speed in step 2 (see text for details on payment mode). Productivity Indicator 2 is censored for subjects who failed to answer the question within 30 seconds. Indicator 3 is elicited in step 3 of the experiment and measures the number of correct answers that subjects produced during a 5-minute work period in a piece rate scheme.

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**Table 2:** Productivity Sorting

| Dependent variable | Piece rate treatment 1 if piece rate chosen | | | | Tournament treatment 1 if tournament chosen | | | | Team treatment 1 if team chosen | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| Productivity Indicator 1 | -0.019*** | | | | -0.011** | | | | -0.001 | | | |
| | [0.006] | | | | [0.004] | | | | [0.002] | | | |
| Productivity Indicator 2 | | -0.083*** | | | | -0.062*** | | | | -0.112*** | | |
| | | [0.024] | | | | [0.022] | | | | [0.033] | | |
| 1 if Prod. Ind. 2 censored | | 0.936 | | | | 0.119 | | | | 1.753** | | |
| | | [0.595] | | | | [0.601] | | | | [0.741] | | |
| Productivity Indicator 3 | | | 0.107*** | 0.107*** | | | 0.064*** | 0.064*** | | | 0.057*** | 0.060*** |
| | | | [0.022] | [0.023] | | | [0.015] | [0.015] | | | [0.016] | [0.016] |
| Effort in 5 minutes | | | | 0.047 | | | | 0.017 | | | | 0.099 |
| | | | | [0.119] | | | | [0.139] | | | | [0.111] |
| Constant | 0.712*** | 1.306*** | -1.908*** | -2.179*** | 0.276 | 0.826*** | -1.316*** | -1.401* | 0.276* | 1.605*** | -0.884*** | -1.465** |
| | [0.194] | [0.314] | [0.465] | [0.833] | [0.188] | [0.279] | [0.332] | [0.791] | [0.166] | [0.407] | [0.328] | [0.735] |
| Number of observations | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |

*Notes:* The table shows Probit estimates of the propensity to sort into the variable payment scheme in the three different treatments. Standard errors are reported in brackets and the implied marginal effects, evaluated the mean of observable characteristics, are shown in parentheses below the coefficient estimates. One asterisk denotes significance at the 10% level, two or three asterisks denote statistical significance at the 5% and at the 1% level respectively.

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**Figure 5:** Fraction of Subjects Opting for Variable Pay and Average Productivity of Sorted Subjects
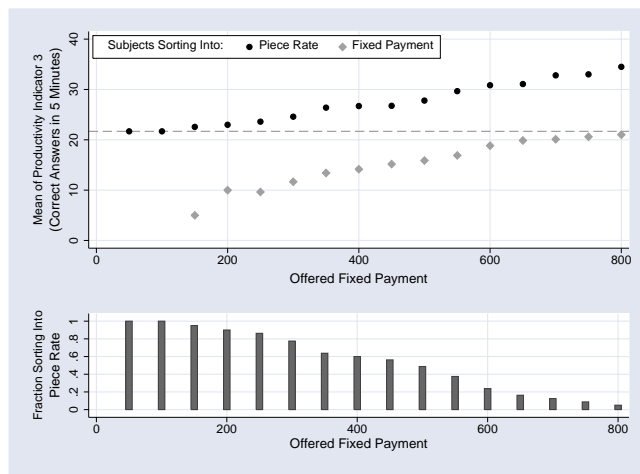


(a) Piece Rate Treatment
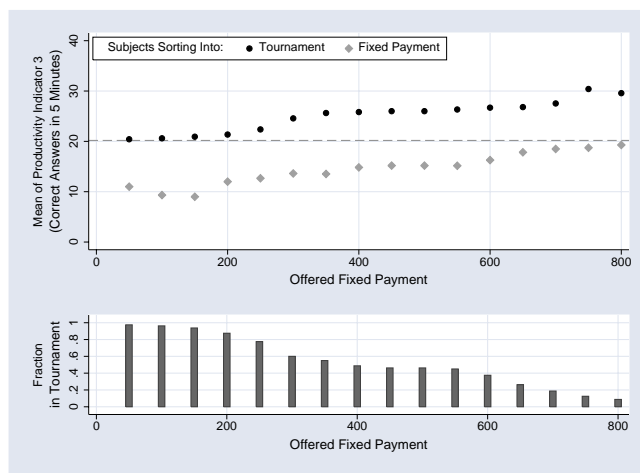


(b) Tournament Treatment
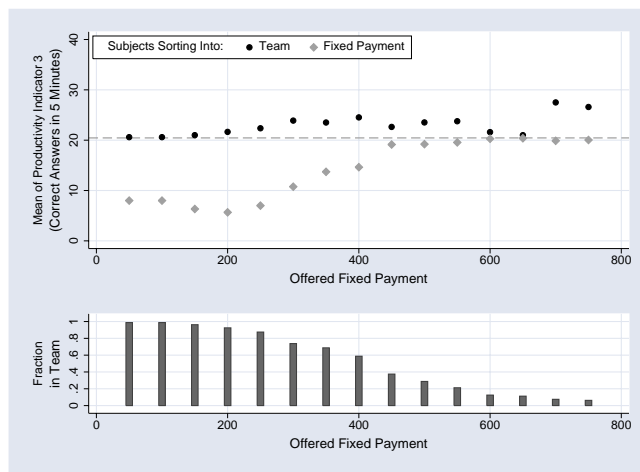


(c) Team Treatment

*Notes:* The upper graph of each sub-figure shows average productivity, measure by Productivity Indicator 3, among subjects who would sort into the respective variable payment scheme at a particular fixed payment alternative. The lower graph of each sub-figure displays the number of subjects who would opt for variable compensation at a given offered fixed payment alternative. Panel (a) refers to the piece rate treatment, Panel (b) to the tournament treatment and Panel (c) to the team treatment.

**Table 3:** Productivity and the Choice between Variable Payment Contracts and Alternative Fixed Compensation Contracts

| | Dependent variable: Lowest fixed payment to which the variable compensation contract is preferred | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Piece rate treatment | | | Tournament treatment | | | Team treatment | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Productivity Indicator 3 | 13.684*** | | | 12.468*** | | | 5.793*** | | |
| | [1.667] | | | [2.242] | | | [1.783] | | |
| Effort in 5 minutes | -6.236 | | | 1.631 | | | -18.381 | | |
| | [13.189] | | | [22.945] | | | [14.952] | | |
| Productivity Indicator 1 | | -2.381*** | | | -1.557* | | | -0.437 | |
| | | [0.563] | | | [0.848] | | | [0.366] | |
| Productivity Indicator 2 | | | -11.313*** | | | -13.325*** | | | -9.716*** |
| | | | [3.129] | | | [3.851] | | | [3.620] |
| 1 if Prod. Ind. 2 censored | | | 72.503 | | | 81.413 | | | 87.002 |
| | | | [83.043] | | | [102.347] | | | [86.126] |
| Constant | 236.117*** | 559.483*** | 646.961*** | 231.279* | 536.542*** | 667.765*** | 442.836*** | 478.409*** | 598.277*** |
| | [82.134] | [25.685] | [39.724] | [131.105] | [37.488] | [47.794] | [91.573] | [25.641] | [46.334] |
| Number of observations | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| R-squared | 0.47 | 0.19 | 0.23 | 0.29 | 0.04 | 0.23 | 0.14 | 0.02 | 0.14 |

*Notes*: The table shows OLS estimates for the lowest fixed payment alternative that is preferred to the variable compensation contract. Standard errors are reported in brackets below the coefficient estimates. One asterisk denotes significance at the 10% level, two or three asterisks denote statistical significance at the 5% and at the 1% level respectively.

**Table 4:** Effort, Stress, and Exhaustion

|  | Before sorting decision | | | After sorting decision | | |
|---|---|---|---|---|---|---|
|  | Piece rate (Mean) | Fixed (Mean) | M-W test (p-value) | Piece rate (Mean) | Fixed (Mean) | M-W test (p-value) |
| Effort | 5.63 | 5.50 | 0.559 | 6.00 | 4.25 | 0.000 |
| Stress | 5.44 | 5.53 | 0.757 | 5.60 | 3.56 | 0.000 |
| Exhaustion | 2.96 | 2.59 | 0.448 | 4.00 | 2.59 | 0.001 |
| Number of observations | 48 | 32 | | 48 | 32 | |

(a) Effort, Stress and Exhaustion in Piece Rate Treatment

|  | Before sorting decision | | | After sorting decision | | |
|---|---|---|---|---|---|---|
|  | Tournament (Mean) | Fixed (Mean) | M-W test (p-value) | Tournament (Mean) | Fixed (Mean) | M-W test (p-value) |
| Effort | 5.54 | 5.39 | 0.442 | 6.15 | 4.76 | 0.000 |
| Stress | 5.54 | 5.41 | 0.854 | 5.74 | 3.98 | 0.000 |
| Exhaustion | 2.90 | 2.85 | 0.749 | 3.36 | 3.29 | 0.773 |
| Number of observations | 39 | 41 | | 39 | 41 | |

(b) Effort, Stress and Exhaustion in Tournament Treatment

|  | Before sorting decision | | | After sorting decision | | |
|---|---|---|---|---|---|---|
|  | Team (Mean) | Fixed (Mean) | M-W test (p-value) | Team (Mean) | Fixed (Mean) | M-W test (p-value) |
| Effort | 5.43 | 5.30 | 0.703 | 5.43 | 4.45 | 0.001 |
| Stress | 5.36 | 5.45 | 0.500 | 5.40 | 3.79 | 0.000 |
| Exhaustion | 2.43 | 2.18 | 0.518 | 3.60 | 2.52 | 0.006 |
| Number of observations | 47 | 33 | | 47 | 33 | |

(c) Effort, Stress and Exhaustion in Team Treatment

**Table 5:** Effort and Incentive Contracts

| | Piece rate treatment | | | | Tournament treatment | | | | Team treatment | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Dependent variable: Self-reported effort in 10 minutes | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1 if piece rate | 1.249*** | 1.253*** | 1.230*** | 1.398*** | | | | | | | | |
| | [0.259] | [0.281] | [0.286] | [0.327] | | | | | | | | |
| 1 if tournament | | | | | 1.126*** | 1.067*** | 1.166*** | 1.225*** | | | | |
| | | | | | [0.253] | [0.259] | [0.283] | [0.290] | | | | |
| 1 if team | | | | | | | | | 0.747*** | 0.771*** | 0.688** | 0.767*** |
| | | | | | | | | | [0.245] | [0.246] | [0.269] | [0.275] |
| Productivity Indicator 1 | | 0.000 | | | | -0.004 | | | | 0.002 | | |
| | | [0.003] | | | | [0.004] | | | | [0.002] | | |
| Productivity Indicator 2 | | | -0.006 | | | | -0.008 | | | | -0.007 | |
| | | | [0.019] | | | | [0.019] | | | | [0.022] | |
| 1 if Prod. Ind. 2 censored | | | 0.000 | | | | 0.154 | | | | -0.240 | |
| | | | [0.385] | | | | [0.375] | | | | [0.376] | |
| Productivity Indicator 3 | | | | 0.009 | | | | -0.003 | | | | 0.016 |
| | | | | [0.015] | | | | [0.012] | | | | [0.012] |
| Effort in 5 minutes | | | | 0.554*** | | | | 0.462*** | | | | 0.573*** |
| | | | | [0.106] | | | | [0.117] | | | | [0.098] |
| Number of observations | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Pseudo R-squared | 0.088 | 0.088 | 0.088 | 0.199 | 0.077 | 0.081 | 0.08 | 0.137 | 0.033 | 0.037 | 0.035 | 0.163 |

*Notes:* Ordered Probit estimates. Standard errors are reported in brackets below the coefficients; * significant at 10%; ** significant at 5%; *** significant at 1%

**Table 6:** Relative Self-Assessment and Sorting

| Dependent variable | Piece rate treatment 1 if piece rate | | Tournament treatment 1 if tournament | | Team treatment 1 if team | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Relative self-assessment | -0.150*** | -0.037 | -0.142*** | -0.081* | -0.099*** | -0.040 |
| | [0.036] | [0.052] | [0.034] | [0.046] | [0.032] | [0.039] |
| | (-0.057) | (-0.014) | (-0.057) | (-0.032) | (-0.038) | (-0.015) |
| Productivity Indicator 3 | | 0.094*** | | 0.039** | | 0.050*** |
| | | [0.029] | | [0.020] | | [0.019] |
| | | (0.035) | | (0.016) | | (0.019) |
| Effort in 5 minutes | | 0.069 | | -0.006 | | 0.085 |
| | | [0.124] | | [0.140] | | [0.112] |
| | | (-0.025) | | (-0.002) | | (-0.032) |
| Constant | 1.616*** | -1.697 | 1.170*** | -0.099 | 1.229*** | -0.786 |
| | [0.363] | [1.071] | [0.320] | [1.070] | [0.359] | [0.988] |
| Number of observations | 80 | 80 | 80 | 80 | 80 | 80 |
| Pseudo R-squared | 0.194 | 0.329 | 0.183 | 0.220 | 0.096 | 0.166 |

*Notes:* Probit estimates. Standard errors are reported in brackets below the coefficients. Marginal effects in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

**Table 7:** Overconfidence and Sorting

| | unweighted | weighted | trimmed 1-18 | trimmed 3-16 | trimmed 5-14 |
|---|---|---|---|---|---|
| | | | Dependent variable: 1 if piece rate | | |
| | (1) | (2) | (3) | (4) | (5) |
| Relative overassessment | 0.036 | 0.047 | 0.033 | 0.025 | 0.033 |
| | [0.050] | [0.046] | [0.051] | [0.052] | [0.059] |
| True rank | -0.193*** | -0.179*** | -0.184*** | -0.152*** | -0.170** |
| | [0.042] | [0.050] | [0.044] | [0.050] | [0.077] |
| Constant | 2.069*** | 1.985*** | 1.987*** | 1.677*** | 1.926** |
| | [0.427] | [0.504] | [0.442] | [0.498] | [0.765] |
| Number of observations | 80 | 74 | 74 | 61 | 42 |

(a) Piece Rate Treatment

| | unweighted | weighted | trimmed 1-18 | trimmed 3-16 | trimmed 5-14 |
|---|---|---|---|---|---|
| | | | Dependent variable: 1 if tournament | | |
| | (1) | (2) | (3) | (4) | (5) |
| Relative overassessment | 0.068 | 0.109** | 0.102** | 0.105* | 0.137** |
| | [0.046] | [0.051] | [0.051] | [0.061] | [0.067] |
| True rank | -0.160*** | -0.223*** | -0.208*** | -0.198*** | -0.234** |
| | [0.035] | [0.053] | [0.045] | [0.057] | [0.095] |
| Constant | 1.446*** | 2.050*** | 1.854*** | 1.782*** | 2.276** |
| | [0.354] | [0.521] | [0.434] | [0.571] | [0.938] |
| Number of observations | 80 | 74 | 74 | 53 | 37 |

(b) Tournament Treatment

| | unweighted | weighted | trimmed 1-18 | trimmed 3-16 | trimmed 5-14 |
|---|---|---|---|---|---|
| | | | Dependent variable: 1 if team | | |
| | (1) | (2) | (3) | (4) | (5) |
| Relative overassessment | 0.045 | -0.002 | 0.027 | 0.048 | -0.039 |
| | [0.038] | [0.040] | [0.040] | [0.045] | [0.056] |
| True rank | -0.129*** | -0.105** | -0.100** | -0.176*** | -0.141* |
| | [0.035] | [0.051] | [0.042] | [0.064] | [0.080] |
| Constant | 1.536*** | 1.274** | 1.252*** | 2.017*** | 1.591** |
| | [0.399] | [0.522] | [0.451] | [0.658] | [0.810] |
| Number of observations | 80 | 68 | 68 | 54 | 41 |

(c) Team Treatment

*Notes:* Probit estimates. Standard errors are reported in brackets and marginal effects are in parentheses below the coefficients; * significant at 10%; ** significant at 5%; *** significant at 1%. Column (1) shows estimates when observations are not weighted by the probability of relative overassessment. The worst subject can never under-assess his relative rank, while the best subject can never over-assess her relative rank. Column (2) shows estimates of models in which observations are weighted by the probability of over- and under-assessment possibilities. In models reported in columns (3) to (5), the sample was trimmed to deal with the problem that some individuals have more opportunity to overestimate or underestimate their rank. Panels (a), (b) and (c) of the table shows Probit coefficient estimates for the piece rate treatment, the tournament treatment and the team treatment, respectively.

**Table 8:** Risk Preferences and Sorting

| Dependent variable | Piece rate treatment 1 if piece rate | | Tournament treatment 1 if tournament | | Team treatment 1 if team | |
|---|---|---|---|---|---|---|
| | untrimmed | trimmed | untrimmed | trimmed | untrimmed | trimmed |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Risk attitude | 0.164* | 0.264** | 0.331*** | 0.312*** | 0.031 | -0.062 |
| | [0.089] | [0.113] | [0.092] | [0.100] | [0.085] | [0.109] |
| | (0.059)* | (0.096)** | (0.132)*** | (0.124)*** | (0.012) | (-0.022) |
| Productivity Indicator 3 | 0.106*** | 0.116*** | 0.074*** | 0.097*** | 0.061*** | 0.154*** |
| | [0.023] | [0.038] | [0.016] | [0.036] | [0.017] | [0.049] |
| | (0.038)*** | (0.042)*** | (0.029)*** | (0.039)*** | (0.023)*** | (0.056)*** |
| Effort in 5 minutes | 0.064 | 0.045 | 0.024 | 0.109 | 0.096 | 0.272* |
| | [0.120] | [0.132] | [0.145] | [0.180] | [0.112] | [0.163] |
| | (0.023) | (0.017) | (0.010) | (0.043) | (0.037) | (0.099)* |
| Constant | -3.096*** | -3.573*** | -3.408*** | -4.139*** | -1.626* | -3.803** |
| | [0.996] | [1.363] | [1.018] | [1.370] | [0.861] | [1.580] |
| Number of observations | 80 | 53 | 80 | 51 | 80 | 48 |
| Pseudo R-squared | 0.356 | 0.231 | 0.33 | 0.286 | 0.158 | 0.199 |

*Notes:* Probit Estimates. Standard errors are reported in brackets and marginal effects in parentheses below coefficients; * significant at 10%; ** significant at 5%; *** significant at 1%. Coefficient estimates for models in columns titled "trimmed" are based on observations of subjects who produced more than 9 but less than 31 answers in the 5-minute work period

**Table 9:** Gender and Sorting

| Dependent variable: | 1 if fixed pay chosen | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| 1 if male | -0.243*** | -0.156** | -0.079 |
| | [0.062] | [0.070] | [0.077] |
| Productivity Indicator 3 | | -0.026*** | -0.028*** |
| | | [0.004] | [0.004] |
| Effort in 5 minutes | | -0.030 | -0.027 |
| | | [0.027] | [0.027] |
| Risk attitude | | | -0.064*** |
| | | | [0.020] |
| Number of observations | 240 | 240 | 240 |
| Pseudo-R-squared | 0.044 | 0.224 | 0.257 |

*Notes:* Probit Estimates. Marginal effects reported. Standard errors in brackets; ** significant at 5%, *** significant at 1%

**Table 10:** Social Preferences and Sorting

| Dependent variable | Piece rate | Tournament | Team |
|---|---|---|---|
| | (1) | (2) | (3) |
| 1 if selfish | -0.2 | -0.23 | -0.43* |
| | [0.397] | [0.292] | [0.069] |
| 1 if reciprocal | -0.04 | -0.35** | -0.03 |
| | [0.820] | [0.017] | [0.818] |
| Productivity Indicator 3 | 0.04*** | 0.03*** | 0.02*** |
| | [0.000] | [0.000] | [0.000] |
| Effort in 5 minutes | 0.02 | -0.01 | 0.06 |
| | [0.734] | [0.919] | [0.199] |
| Number of observations | 80 | 80 | 80 |
| Pseudo R-squared | 0.332 | 0.245 | 0.192 |

*Notes:* Probit estimates. Standard errors in brackets. Marginal effects reported; * significant at 10%; ** significant at 5%; *** significant at 1%