

# Online Appendix (For Online Publication Only)

Cullen and Perez-Truglia, “The Salary Taboo”

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## A. FURTHER DETAILS AND ANALYSIS

### A.1 *More Details about the Subject Pool*

We present descriptive statistics about the employee data in Table A.1. Column (5) corresponds to the final sample of 755 survey respondents. Column (1) corresponds to the universe of employees. The comparison between columns (1) and (5) implies that our sample is quite representative of the universe of employees. While some of the differences in gender, age, education and seniority are statistically significant, they are always economically small. For instance, the subject pool is 73% female vs. 71% female in the universe, the mean ages are 29.2 vs. 30.5 years old, the share of college graduates is 86% vs. 85%, and the mean seniority is 4.2 vs. 4.8 years. The only noticeable difference between columns (1) and (5) of Table A.1 is with respect to salary: our subject pool is 30% poorer than the universe of employees. The reason for this difference in average salary is quite simple: we did not send the survey invitation to employees in the highest pay bands. These excluded employees, such as the CEO and vice presidents, have salaries that drive up the average salary in the universe of employees quite a bit. To demonstrate this, columns (2) and (3) provide summary statistics for the sample of individuals who were not invited and were invited to the survey, respectively. The comparison of average salary across these two columns shows that the bulk of the difference in mean salary between the subject pool and the universe of employees is coming from the selection of employees to be invited to the survey. For the sake of completeness, columns (4) and (5) provide statistics for employees who were invited to the survey but did not respond and individuals who responded, respectively. The average salary of the survey respondents is similar to the average salary of non-respondents.

Table A.2 presents some descriptive statistics about how subjects overlap with other employees in terms of demographic characteristics. For instance, the first row corresponds to the overlap in gender. Thus, column (1) shows the average probability that a subject has the same gender as one of the five peers assigned to them; and column (2) shows the average probability that a subject has the same gender as a random employee from the firm. The comparison between columns (1) and (2) show that employees are more similar to their peers than to the company as a whole. For instance, subjects have a 74% probability of having the same gender as one of their five peers but they have a 59% probability of having the same gender as a random employee from the firm.

## A.2 *More Details about Baseline Misperceptions*

Only a third of respondents provide a guess of the average peer salary that is close (i.e., within 5%) to their own salaries. This evidence suggests that employees use other information sources besides their own salaries to come up with their guesses. To assess whether this extra information improves their accuracy, Figure A.1.a compares the misperceptions with respect to the benchmark scenario in which individuals report their own salaries as their guesses. The extra information does not seem to improve their accuracy: according to a non-parametric test reported in Figure A.1.a, we cannot reject the null hypothesis that these two distributions of misperceptions are the same (p-value=0.126). If individuals report their own salaries as their guesses for average peer salary, the mean absolute error (16%) is only slightly higher than the mean absolute error of the actual guesses provided by the subjects (14.6%).

Figure A.1.b provides another useful benchmark: what misperceptions would look like if an individual’s guess for average salary among the five peers equals the actual average salary among all peers. The MAE would have been much lower (around 10%, instead of 14.6% in reality). This finding shows that most misperceptions are not caused by asking about a specific subsample of peers.

As a robustness check, we can take advantage of the fact that we replicated some of the measurements made in a previous study (Cullen and Perez-Truglia, 2022), with a similar sample but with some methodological differences: we used a quadratic scoring rule to incentivize responses, we used smaller reward amounts, and we asked about the average salary among all peers instead of just a sample of five peers. Despite these differences, the results from the two experiments are quite consistent in magnitude: the MAE of peer average guesses are 14.6% in this survey, which is in the same order of magnitude as the 11.5% reported in Cullen and Perez-Truglia (2022).

Last, Figure A.2 provides a finer analysis of the accuracy of the guesses. Figure A.2.a presents a binscatter plot and corresponding OLS regression between the guess and actual average salary of the peer group. We see that, as expected, they are positively correlated, with a coefficient of 1.113. Figure A.2.b presents the raw scatter plot of this relationship, with the 45° line that indicates the values for which the guess would have been equal to the actual salary. It shows that individuals both overestimate and underestimate their peers’ salaries, although for peer groups with higher average salaries they tend to overestimate more than underestimate.

### A.3 *Willingness to Pay for Privacy and to Search for Information and Privacy Norms*

We design an additional validation test for our measures of willingness to pay for privacy and willingness to search for information. We would expect that individuals who find it more uncomfortable/unacceptable to ask about salaries/seniority will be less willing to search for this information, and more willing to pay for privacy. Figures A.3 and A.4 show the correlation between these measures and beliefs on privacy norms, for the salary and seniority treatment groups, respectively. Panels (a) and (b) of each figure present the relationship between willingness to pay for privacy and how unacceptable/uncomfortable the individual believes it is to ask about salary information, and panels (c) and (d) between willingness to search for information and these beliefs. As would be expected, we find that on average individuals who find it more unacceptable/uncomfortable to ask about salaries/seniority are also more willing to pay for privacy, and less willing to search for information.

### A.4 *Results: Willingness to Pay for Readily Available Information*

Our survey instrument included a question to measure how interested subjects were in learning about peer salaries (or seniority). We designed a question that, despite some differences, follows the design from Cullen and Perez-Truglia (2022) (for more details, see Section 4.2 of that paper). More precisely, after subjects enter their guesses, they are given the chance to buy a piece of information, that is, a signal related to the peer salary they are trying to guess. This signal consists of the average salary or seniority among a different sample of five peers (i.e., from a draw of five peers). Although not perfectly informative, this piece of information is still useful to improve the accuracy in the guessing game and to learn about the average salary among all peers. To elicit this information in an incentive-compatible way, we employ the BDM methodology: subjects enter their bids and compete with a bid generated by the computer. As usual, these bids are executed only for a minority of randomly selected respondents.

Figure A.5.a shows the distribution of willingness to pay for a signal indicating the average salary among a different sample of five peers. The median employee is willing to pay roughly \$13 for the information. This amount suggests that the bottom half of the subjects, who are willing to pay no more than \$13 for the information, have misperceptions mostly due to lack of interest.

The upper part of the distribution, however, is willing to pay substantial amounts. For example, the top 26% of subjects are willing to pay amounts that are approximately uniformly distributed between \$100 and \$1,300, with a median of \$652 and a mean of \$640. These large valuations suggest that these employees have misperceptions not because they do not care

about the information but because the costs of searching for the information are high. This willingness to pay for information is an order of magnitude higher than the guessing game rewards. As a result, these individuals cannot be bidding for the information with the main goal of winning the guessing game. Instead, these subjects may need to use the information for high-stakes decisions, such as whether to take an outside job offer or request a raise or a promotion. As noted by (Stigler, 1962), it is not difficult to rationalize high valuations for salary information. For instance, if the information is expected to translate into a salary increase of just 5% and for just one year, then the employee should be willing to pay up to 5% of the annual salary (over two weeks' worth of pay) for this information.

As discussed in Section 3.2, the BDM method is imperfect and thus subject to biases and measurement error. More specifically, one special concern is that our estimates of willingness to pay may be sensitive to the elicitation method. In our paper Cullen and Perez-Truglia (2022) we provide additional robustness for this measure. For instance, we measured willingness to pay for information in a comparable sample, but used the price-list method instead of the open-ended method used in this experiment, and show that the distribution of willingness to pay is similar across the two elicitation methods. Moreover, this finding is consistent with evidence from other studies showing that measures of willingness to pay are largely similar across different elicitation methods (Brebner and Sonnemans, 2018).

To validate this measure of willingness to pay for information, we can also rely on the rational inattention hypothesis. It is plausible that subjects bidding close to the median (\$13) are bidding primarily to improve the chances of winning the guessing game. According to rational inattention, the individuals who face higher rewards in the guessing game should be willing to pay more for the information, because they stand to gain more from it. Figure A.5.b reports the results for this test. We find that, consistent with rational inattention, increasing the reward size by \$1 increases the median willingness to pay for information by \$0.38 (p-value=0.030).

#### A.5 *Willingness to Pay for Privacy by Perceived Relative Standing*

Figure 3.b shows that there is a significant relationship between perceived relative salary and the willingness to pay for privacy. Figure A.6 is a reproduction of Figure 3.b, but for seniority instead of salary. It shows that the relationship between willingness to pay for privacy and the perceived distance between own-seniority and the reference group is downward sloping and statistically insignificant.

## A.6 *Additional heterogeneity results*

Table A.3 presents the heterogeneity results by gender shown in Table III, but controlling by the percentage of peers of the same gender as the respondent. As individuals could be used to talking more or feel more comfortable sharing about salaries with co-workers of the same gender, one could expect that respondents would be more accurate guessing salaries of peers of their same gender. Therefore, we are interested in whether the results on gender hold when controlling by gender composition of the peers drawn. We find that, relative to Table III, the coefficient on “Female” in “Accuracy” (column (3)) and “Error” (column (4)) are very similar in terms of sign and statistical significance. We also see that the differences in perceived accuracy (columns (1) and (2)) are less statistically significant once we include this control variable.

In addition, we include heterogeneity results by tenure of the respondent (Table A.4), as a benchmark for the heterogeneity by gender. We do not find significant differences in accuracy by years of tenure (columns (3) and (4)), and only a small negative correlation between tenure and perceived accuracy (column (2)).

We are also interested in whether respondents’ misperceptions about salaries depend on how heterogeneous salaries are within the peer group. Figure A.7 panel (a) presents the average absolute difference between the salary of each peer relative to the average salary of the group. If this percentage is small, it indicates that the salaries of the five peers drawn are similar to each other, while if it is large that the group’s salaries are more heterogeneous. This histogram shows that within a peer group there are typically modest differences in pay, and almost never large differences (above 30%). As discussed in Cullen and Perez-Truglia (2022), this “horizontal” compression in salaries is quite common in organizations. Panel (b) of Figure A.7 shows the relationship between salary heterogeneity in the peer group and misperceptions about salary. We do not find a significant correlation.

Finally, we explore if larger differences between the respondent’s own salary and the average salary of the peer group are correlated with higher misperceptions of peers’ salaries. Figure A.8 shows in panel (a) an histogram of the percentage difference between the respondent’s own salary and the average of the peer group, and in panel (b) the relationship between this difference and the respondent’s misperception on salaries. We do not find a significant correlation.

## A.7 *Diffusion of Information about Salary vs. Seniority*

In this section, we compare the results of the salary and seniority surveys. The key comparisons are presented in Table A.5. This table presents a series of regressions of some outcomes

of interest on a dummy variable that equals 1 if the survey type is seniority and 0 if the survey type is salary.

We start by comparing the misperceptions about peer average salary and peer average seniority. One challenge is that guessing the average seniority of five peers is significantly harder than guessing the average salary of five peers, because there is more variation within peer groups in seniority than in salary. To make the misperceptions more comparable between salary and seniority, we divide the salary (seniority) misperceptions by the within-group standard deviation in salary (seniority).

Columns (1) and (2) of Table A.5 correspond to the comparison of misperceptions, using the normalization discussed above. The dependent variable in column (1) corresponds to the average absolute misperceptions, which is 0.707 for salary and 0.469 for seniority, with a p-value of the difference of  $<0.001$ . In other words, on average, individuals miss the mark by 0.469 standard deviations when guessing peer seniority but they miss the mark by even more, 0.707 standard deviations, when guessing peer salary.

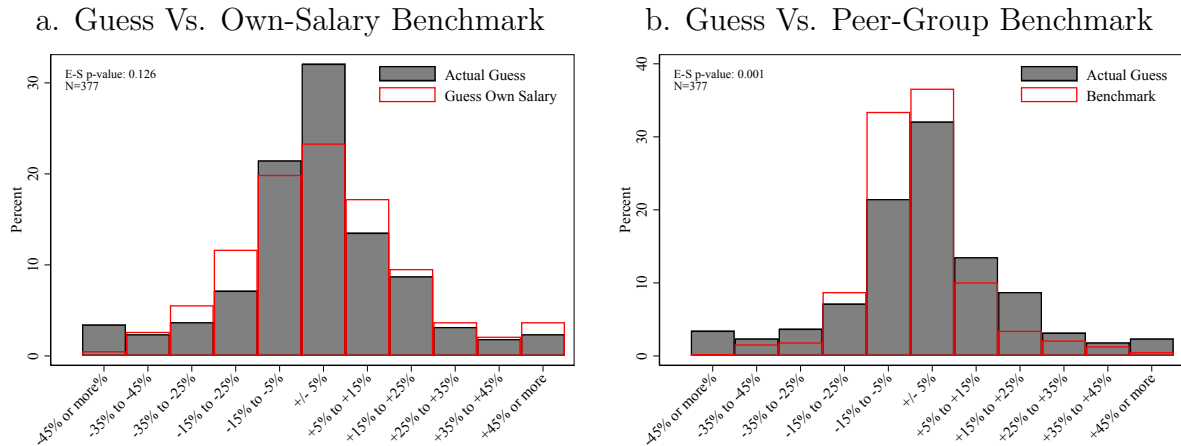
As a robustness check, the dependent variable in column (2) corresponds to the misperceptions that (hypothetically) would have arisen if the respondents reported their own salary (or seniority) as the guess. The results from column (1) and column (2) suggest that the individuals are as good at guessing peer salaries in actuality (average “actual” misperceptions of 0.707, from column (1)) as they would have been if the only information they had was their own salary (average “naive” misperceptions of 0.694, from column (2)). On the contrary, individuals guess their peers’ seniority in actuality (average “actual” misperceptions of 0.469, from column (1)) with greater accuracy than they would if the only information they had was their own seniority (average “naive” misperceptions of 0.896, from column (2)). This evidence suggests that there is substantially more information diffusion for seniority than for salary.

One possible interpretation for the differences in misperceptions is that the costs of information acquisition (i.e., information frictions) are higher for salary than for seniority. An alternative interpretation could be that the benefits from information acquisition are higher for seniority than for salary. To distinguish between these two explanations, we exploit data on the willingness to pay for readily available information. If the differences in misperceptions are driven by higher benefits for seniority, we should observe a higher willingness to pay for information about seniority than about salary. Column (3) of Table A.5 tests that hypothesis. We find that, on average, there is a large difference, but in the opposite direction: employees are willing to pay more for a signal of peer salary (\$179) than for a signal of peer seniority (\$130), with the difference being statistically significant (p-value=0.026). This evidence suggests that the differences in misperceptions between salary and seniority must

be due, at least partially, to differences in the costs of information search.

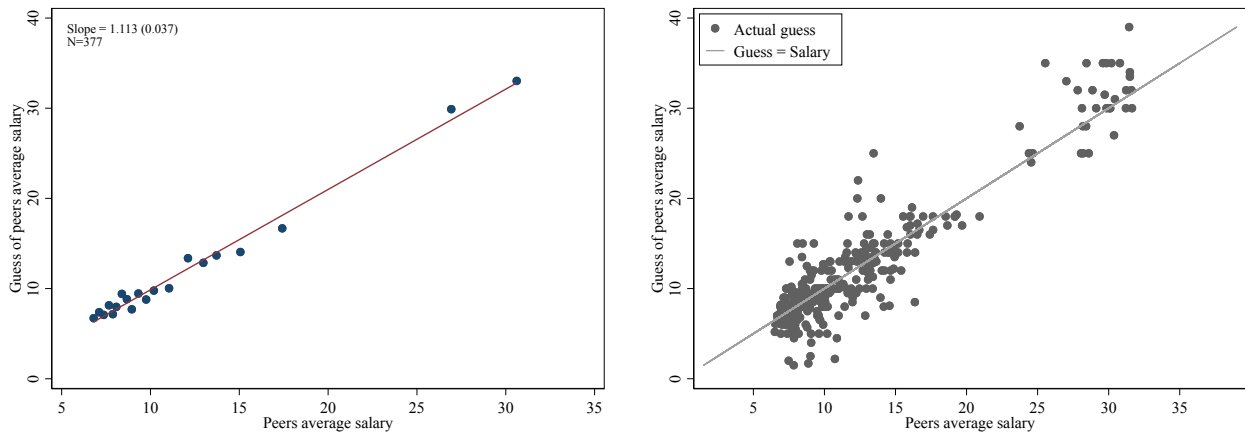
Column (4) of Table A.5 corresponds to the revealed-preference measure on willingness to pay for privacy. There is an economically large difference in this outcome. Individuals need compensation of \$68, on average, to allow an email revealing their salary to peers. Individuals need compensation of only \$29, on average, to allow an email revealing their seniority. This large difference in demand for privacy, which is statistically significant (p-value<0.001), is consistent with the differences in privacy norms. Note that, even though the privacy norms are much weaker for seniority information, there is still significant willingness to pay to conceal seniority information. That evidence suggests that while privacy norms are a significant barrier to share information, it is probably not the only factor at play.

Figure A.1: Salary Information: Misperceptions



Notes: Histograms of the salary misperceptions, defined as the difference between the respondent's guess about the average salary among the sample of five peers (according to the incentivized elicitation) and the actual average salary (according to the firm's administrative records), divided by the actual average salary. Panel (a) provides the following benchmark: what the misperceptions would have been if the respondent had provided a guess equal to her own salary. Panel (b) provides yet another benchmark: what the misperceptions would have been if the respondent had provided a guess equal to the actual average salary among all peers (not only the five selected peers). E-S is the Epps-Singleton characteristic function test of equality of two distributions.

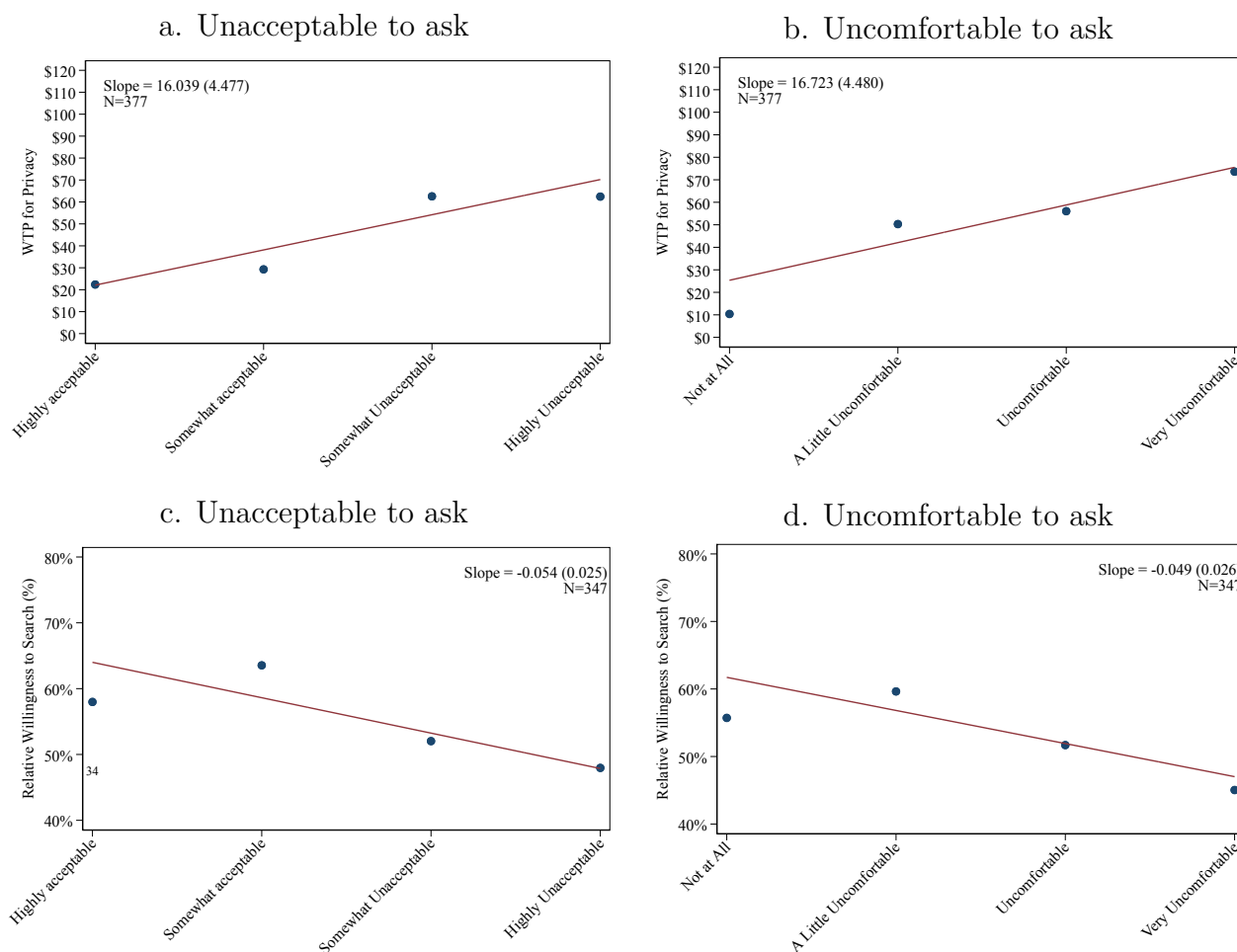
Figure A.2: Guess Vs. Actual Salary



Notes: This figure shows the relationship between the respondents' guesses and the actual average of the peer group. The panel on the left presents a binned scatter plot and corresponding OLS regression, and the panel on the right shows the raw scatter plot with the 45% line.

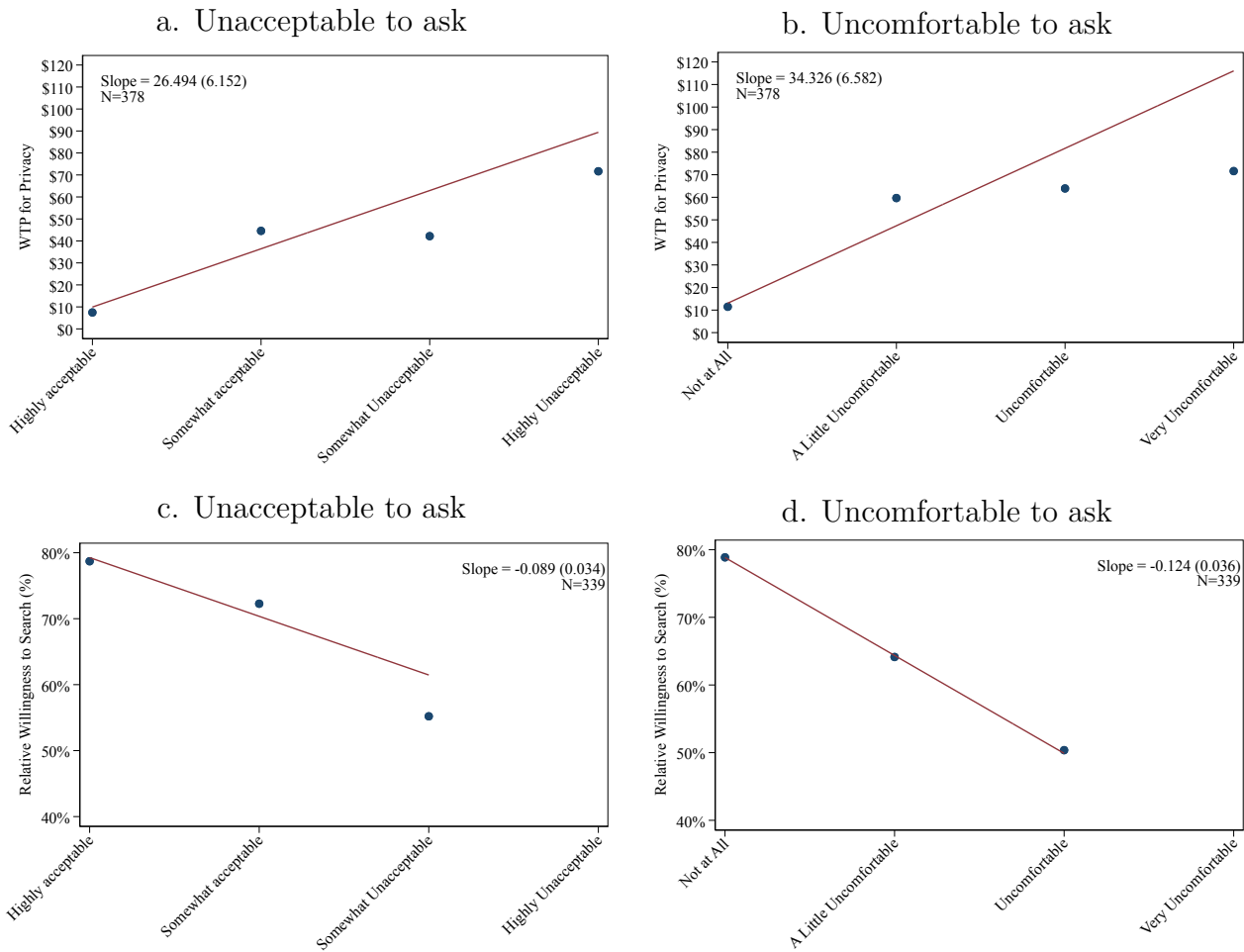


Figure A.3: Salary Information: Willingness to Pay for Privacy and to Search vs. Privacy Norms



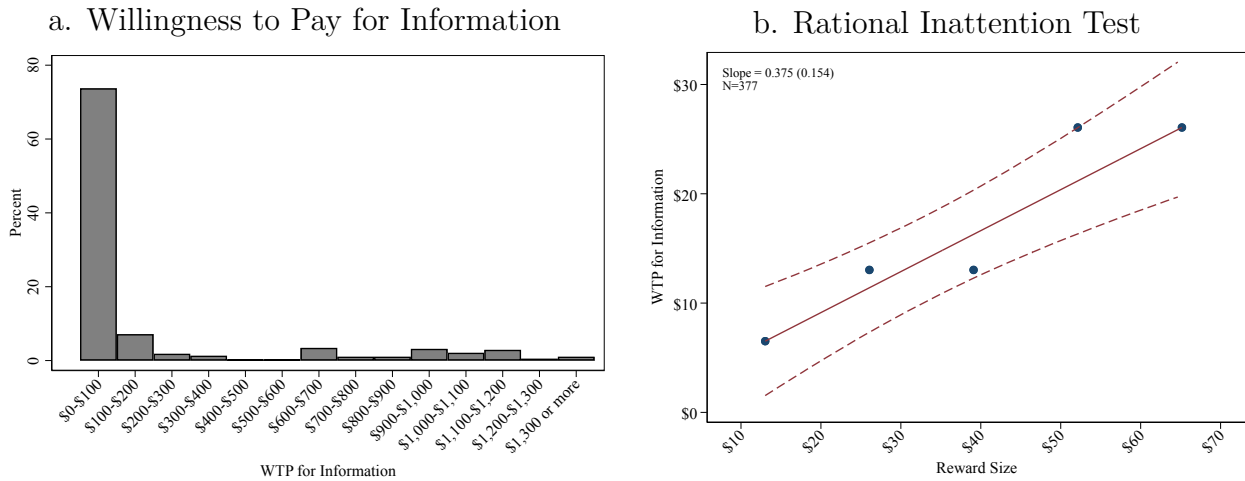
Notes: The figure shows, for the salary treatment group, the relationship between our measures of willingness to pay for privacy (panels (a) and (b)) and willingness to search for information (panels (c) and (d)) and the preferences for privacy reported by the individuals.

Figure A.4: Seniority Information: Willingness to Pay for Privacy and to Search vs. Privacy Norms



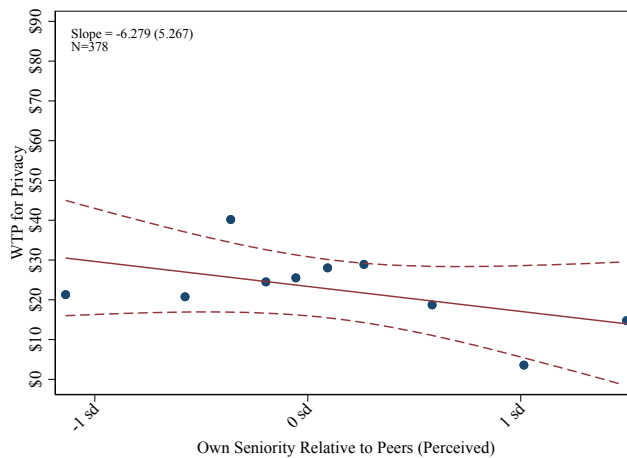
Notes: The figure shows, for the seniority treatment group, the relationship between our measures of willingness to pay for privacy (panels (a) and (b)) and willingness to search for information (panels (c) and (d)) and the preferences for privacy reported by the individuals.

Figure A.5: Salary Information: Willingness to Pay for Readily-Available Information



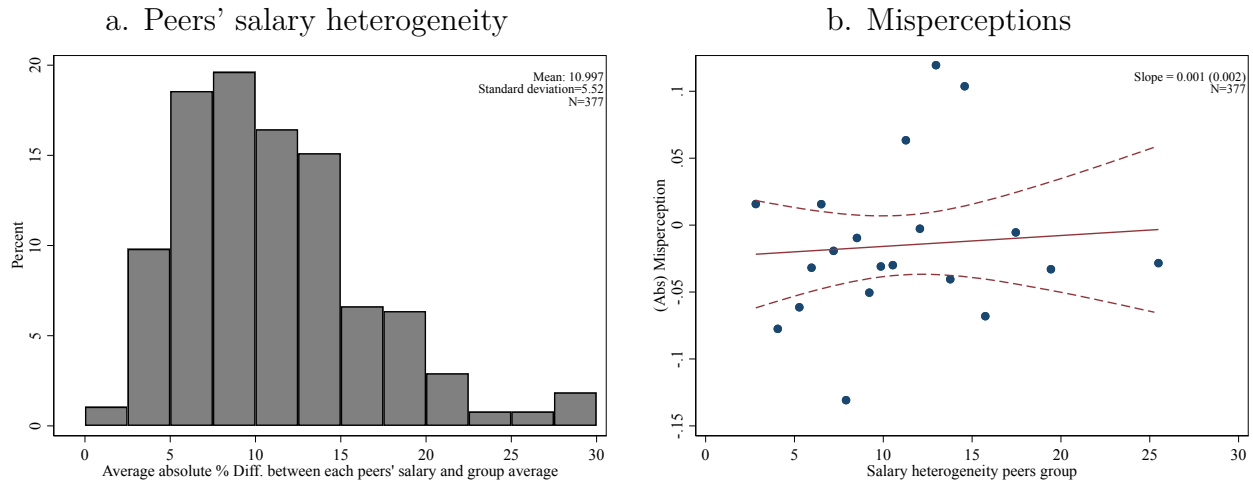
Notes: Panel (a) shows the distribution of the willingness to pay for information about the average salary among a sample of five peers, as measured by the respondent's incentive-compatible bid. Panel (b) provides a binned scatter plot with the relationship between the reward amount and the median willingness to pay for information. The slope is calculated with a quantile (median) regression.

Figure A.6: Willingness to Pay for Privacy by Perceived Relative Standing



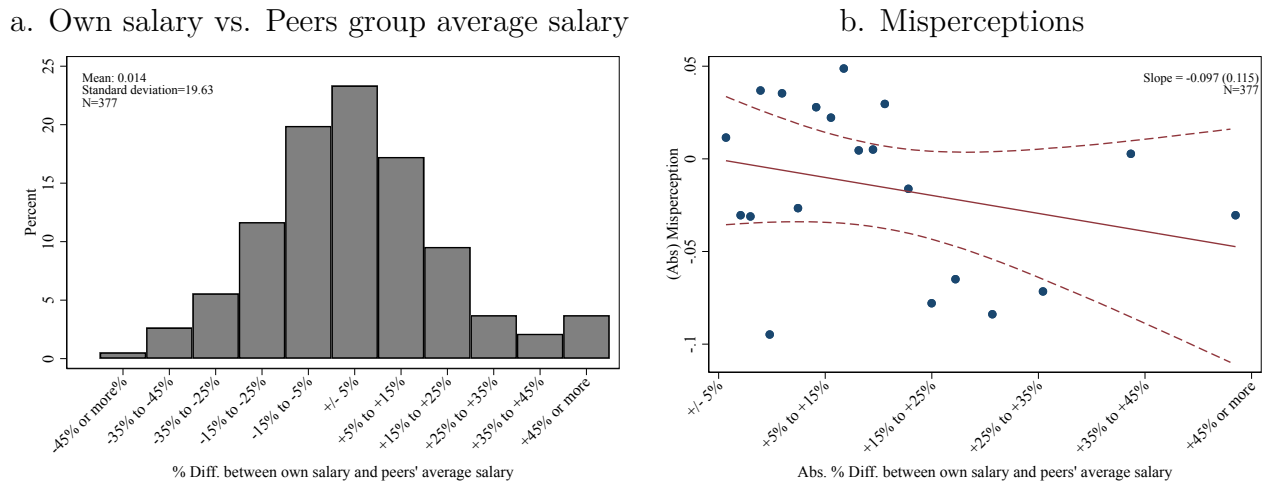
Notes: The figure shows a binned scatter plot with the relationship between the willingness to pay for privacy and the respondent's perceived relative tenure with respect to the reference peer group. Distance from the reference group has been normalized by a standard deviation among peers, and winsorized at the 5th/95th percentiles. The slope is calculated using interval regression with robust standard errors.

Figure A.7: Peers' salary heterogeneity and Misperceptions



Notes: In panel (a) the histogram shows the average absolute difference between each peer's salary and the average salary of the group. A higher average difference indicates that the salaries of the peer group are more dispersed, while a lower average difference indicates that peers' salaries are similar. In panel (b) the binscatter plot and corresponding OLS regression show the relationship between this measure of the heterogeneity of peers' salaries and salary misperceptions. Salary heterogeneity winsorized at 30%.

Figure A.8: Difference between own salary and peers' salary and Misperceptions



Notes: In panel (a) the histogram shows the distribution of the percentage difference between the salary of the respondent and the average salary of their peer group. In panel (b) the binscatter plot and corresponding OLS regression show the relationship between this absolute difference and salary misperceptions. Differences in own salary and peers' average salary winsorized at  $\pm 50\%$ .

Table A.1: Characteristics of Subject Pool

	All	Invited		Responded	
	(1)	No (2)	Yes (3)	No (4)	Yes (5)
Female (=1)	0.71 (0.01)	0.69 (0.01)	0.76 (0.01)	0.79 (0.01)	0.73 (0.02)
Age (Years)	30.49 (0.06)	30.90 (0.07)	29.18 (0.11)	29.15 (0.14)	29.24 (0.18)
College (=1)	0.85 (0.00)	0.85 (0.00)	0.85 (0.01)	0.85 (0.01)	0.86 (0.01)
Seniority (Years)	4.75 (0.04)	4.85 (0.05)	4.44 (0.09)	4.59 (0.11)	4.21 (0.13)
Own Salary (Masked)	1.42 (0.02)	1.54 (0.02)	0.99 (0.01)	0.99 (0.02)	1.00 (0.02)
Observations	(Masked)	(Masked)	1,899	1,144	755

Notes: Average pre-treatment characteristics of the employees, with standard errors in parentheses. *Female* takes the value 1 if the employee is female and 0 otherwise. *Age* is the employee's age (in years) as of December 2017. *College* takes the value 1 if the employee finished College or a higher degree, and 0 otherwise. *Seniority* is the number of years from the date when the employee joined the company until December 2017. *Own Salary* is the employee base monthly salary as of December 2017 (due to the sensitive nature of the data, we do not reveal the unit of measurement for this variable). Column (1) corresponds to the entire company. Columns (2) and (3) break down the universe of employees by those who were not invited to participate in the survey and those who were invited, respectively. Columns (4) and (5) break down the employees who were invited to the survey by those who did not complete the survey and those who did, respectively. We do not reveal the total number of employees to protect the identity of the firm.

Table A.2: Overlap of Characteristics between Employees

	Peers (1)	All employees (2)
Gender	74.16	59.44
Salary Band	96.47	23.49
Tenure (cohort)	65.62	47.09
Age (cohort)	40.10	26.52
Marital status	64.87	51.80
Major	19.58	12.79
School	6.83	2.69
Nationality	100.00	99.73
Hometown	0.51	0.15

Notes: The table shows the average overlap in characteristics between the subjects and other employees. Column (1) shows the average probability that a subject has the same gender/band/etc. as one of the five peers assigned to them. Column (2) shows the average probability that a subject has the same gender/band/etc. as a random employee from the firm.

Table A.3: Heterogeneity by Gender, Controlling for Peers' Gender Composition

	Perceived Acc. (pp)		Accuracy (pp)	Error (pp)	Attitudes			WTP (\$)	Extra Week (pp)		WTP (\$)
	(1) Direct	(2) Indirect	(3) Actual	(4) Abs. Error	(5) Uncomf.	(6) Unacc.	(7) Recipr.	(8) Privacy	(9) Direct	(10) Indirect	(11) Signal
Female (=1)	-0.052 (0.051)	-0.058 (0.065)	0.044 (0.054)	0.001 (0.020)	-0.097 (0.116)	0.050 (0.116)	-0.000 (0.039)	8.283 (15.852)	0.004 (0.030)	0.062* (0.035)	-21.745 (37.872)
% peers of same gender	-0.013 (0.078)	-0.146 (0.094)	0.087 (0.090)	0.003 (0.032)	0.100 (0.191)	0.270* (0.157)	0.000 (0.056)	-74.294*** (22.406)	-0.086* (0.044)	-0.135** (0.053)	121.552** (55.308)
Constant	0.604*** (0.055)	0.575*** (0.059)	0.226*** (0.069)	0.144*** (0.022)	1.423*** (0.127)	0.924*** (0.106)	0.889*** (0.039)	117.997*** (15.416)	0.645*** (0.046)	0.316*** (0.051)	105.621** (40.784)

Notes: The table presents the same regressions as Table III, but controlling for the gender composition of the peers (percentage of peers of the same gender as the respondent). N=376. Significant at \*10%, \*\*5%, \*\*\*1%.

Table A.4: Heterogeneity by Tenure

	Perceived Acc. (pp)		Accuracy (pp)	Error (pp)	Attitudes			WTP (\$)	Extra Week (pp)		WTP (\$)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Direct	Indirect	Actual	Abs. Error	Uncomf.	Unacc.	Recipr.	Privacy	Direct	Indirect	Signal
Own tenure (years)	-0.003 (0.006)	-0.018*** (0.006)	0.004 (0.006)	0.003 (0.003)	-0.045*** (0.012)	-0.036*** (0.013)	0.007* (0.004)	-1.513 (1.433)	-0.000 (0.004)	-0.010*** (0.004)	-9.524** (4.131)
Constant	0.571*** (0.032)	0.507*** (0.036)	0.306*** (0.034)	0.135*** (0.016)	1.620*** (0.071)	1.313*** (0.076)	0.858*** (0.024)	76.077*** (10.290)	0.585*** (0.039)	0.309*** (0.037)	219.513*** (27.329)

Notes: The table presents the same regressions as Table III, but instead of using a gender dummy as the right-hand-side-variable, we use the respondent's own tenure. N=376. Significant at \*10%, \*\*5%, \*\*\*1%.

Table A.5: Comparison Between the Two Survey Types: Salary Vs. Seniority

	Abs. Error (Std.)		WTP (\$)	
	Actual (1)	Naive (2)	Signal (3)	Privacy (4)
Seniority Dummy (=1)	-0.238*** (0.056)	0.202*** (0.052)	-49.120** (21.894)	-38.931*** (7.636)
Constant	0.707*** (0.049)	0.694*** (0.034)	178.641*** (18.454)	67.538*** (5.768)

Notes: N=755. Significant at \*10%, \*\*5%, \*\*\*1%. Standard errors in parentheses clustered at the position level. Each column corresponds to a different regression and based on a different dependent variable: the standardized mean absolute error if the respondent had hypothetically entered her own salary/seniority as her guess (column (1)), the standardized mean absolute error of the actual guess provided by the respondent (column (2)), the willingness to pay for a signal of the average salary/seniority among five peers (column (3)), the willingness to accept or pay for sending an email revealing the respondent's salary/seniority to five of his or her peers (column (4)). The right hand side variable, *Seniority*, equals to 1 if the respondent was assigned to the survey about seniority and 0 if the respondent was assigned to the survey about salary. Columns (1) and (2) are estimated with Ordinary Least Squares, while columns (3) and (4) are estimated with an interval regression model. The standardized mean absolute error is defined as the difference between the individual's guess for the average salary/seniority in the sample of five peers and the actual average of those five peers, divided by the standard deviation of salary/seniority within the peer group.

## B. EMAIL WITH INVITATION TO SURVEY

Dear [Employee's Full Name],

We would like to invite you to participate in a survey. It takes less than 30 minutes to complete it. To acknowledge your help, you will be eligible to monetary rewards, for a minimum of \$10.

This survey is conducted by [Bank's Name] in collaboration with researchers from U.S. universities such as Harvard University. It will help us understand how to communicate with our employees.

[Follow this link to take the survey](#)

If the link does not work, just copy and paste the following URL to your Internet browser: [Survey's URL]

The survey rewards will be deposited automatically in your bank account within 2 days of survey completion. Should you have any inquiries about your rewards, please contact us at [Survey Team's Extension Number].

In case of technical problems with the survey, please contact IT Support ([Information Technology's Extension Number]).

You were selected at random to receive this invitation, and all your responses will remain confidential.

Thank you for your participation. Your contribution will help to make [Bank's Name] a better place.

Sincerely,

Chief Economist, [Bank's Name]



## C. SURVEY INSTRUMENT

Dear [Respondent's Name],

You are invited to participate in a survey conducted by [Bank Name]. This survey was designed in collaboration with academic researchers from Harvard University and the University of California at Los Angeles. This survey will teach us about how [Bank name]'s employees learn about their workplace, earnings, and career prospects.

As a reward, you will receive at least \$10. In addition to this payment, you will qualify to earn additional rewards between \$0 and \$100.

ALL SURVEY RESPONSES ARE COMPLETELY CONFIDENTIAL.

Thank you in advance for your participation!

Sincerely,

Chief Economist  
[Bank Name]

Please click here to confirm that you are [Respondent's Name] and you would like to take part in this study

>>

You'll play a series of short games. In these games, we will ask how much you would pay for something, or how much you would sell something for. Then a computer will bid against you.

Next to these questions, you will see the message: "You are bidding against a computer, not a person, **it is best for you to report truthfully.**" Here's the explanation:

These games are just 'pretend' but we will choose **a few lucky participants** from this survey to play for real!

So let's say we ask 'How much would you be willing to pay for an iPhone X? If you say \$1,000, and the computer says \$800, we will give you the iPhone X for free. If you say \$800 and the computer says \$1,000, we will give you \$1,000. This auction was designed by economists so that it is best for you to say your true preference: that is, say exactly how much you would really be willing to pay for the iPhone X.

In all of these games, you can earn money, but you will never lose money.

Remember that this is not a regular first-price auction, in which it is optimal to bid less than your true valuation. In this type of auction, called the **second-price auction**, you will be always worse off if you try to under bid or over bid your true valuation.



Let's do a practice question: How much would you be willing to pay for an iPhone X?

Remember you are bidding against the computer, so it is in your own interest to report truthfully. Also, if you don't want an iPhone X, you can always sell it (for your reference, the market price of the iPhone X is around \$1,000).

\$



0 2 5 9

Let's play a guessing game. **You have 3 minutes to answer this question, or you won't qualify for the prize.**

The game consists of guessing the average salary among five of your peers. Your peers are defined as your coworkers who work in your same position (Teller) and unit (Branch 25). According to our records, you have 12 peers in this group. The question is about the following sample of 5 out of the 12 peers:

- [First and Last Name of Peer 1]
- [First and Last Name of Peer 2]
- [First and Last Name of Peer 3]
- [First and Last Name of Peer 4]
- [First and Last Name of Peer 5]

The rules of the guessing game are simple: if your guess falls within +/-5% of the true average among these 5 peers, you will receive a reward of \$[Reward Amount].

What is the average [Salary/Tenure] among the 5 selected peers as of December 2017?

[\$/Years]



You have the opportunity to buy the following information: the average salary among a *different* random sample of 5 of your 12 peers.

If you buy this information, you will be given the opportunity to use that information to revise your guess. This can improve your chances of winning the \$[Reward Amount] reward.

What is the maximum amount of money you would be willing to pay for the information (the average salary among a random sample of 5 peers)?

Remember that you are bidding against the computer, so it is in your own interest to report truthfully.

\$



You have not been selected to be able to buy information. Please continue with the survey.



Before proceeding with the survey, we want to introduce a new type of question.

Let's say you are playing the following game: a coin is flipped, and you have to guess whether it fell head up or tails up. If you guess correctly, then you get \$100; if you do not guess correctly, you get \$0. Note that the expected prize for this game is \$50.

How much should we pay so that you give up the right to play this coin game? Remember that you are bidding against the computer, so it is in your own interest to report truthfully.

\$



You have entered a guess of \$[Guess] about the average [Salary/Tenure] of your peers. If this guess falls within +/-5% of the truth, you will be rewarded \$[Reward Amount]. What do you think is the probability that your guess will fall within +/-5% of the truth?

%





Since you expect to win a reward of \$[Reward Amount] with a probability of [Probability]%, your expected reward is \$[Probability\*Reward Amount].

Now, we want to offer you a fixed amount of money to not play this guessing game. We do this with all participants, regardless of their guesses. What is the smallest amount of money that you would be willing to accept to give up the right to play the guessing game? Remember that you are bidding against the computer, so it is in your own interest to report truthfully.

\$



It has been determined that you will continue to play the guessing game.



Some participants, selected at random, will be given an additional week to revise their guesses. You will find out if you get the additional week in the next screens.

Please imagine that you were given the additional week. You could use this additional week to search for information and increase the accuracy of your guess. For instance, you could use this additional time to ask some of your peers about their salary.

Remember that, without the additional week, you expect a probability of winning the guessing game of [Probability]%. If you had the additional week, what is the probability that you would win the guessing game?

%



Now, imagine that you were given the additional week to revise your guess, which you can use to search for information and increase the accuracy of your guess. Since you expect to win a reward of \$[Reward Amount] with probability [Probability]%, that means that your expected reward with the additional week is \$[Probability\*Reward Amount].

Without the additional week, you were willing to accept \$[Amount Entered] in exchange to give up the right to play the guessing game. Now, with the additional week, how much should we pay so that you give up the right to play this game? Remember that you are bidding against the computer, so it is in your own interest to report truthfully.

\$



You were not chosen to have the extra week to revise your guess.



The survey is almost over. In this last section, we want to know how you would feel if someone revealed information about your [Salary/Tenure] to some of your peers.

We could send an email to your 5 selected peers revealing your [Salary/Tenure], including your full name. This email would explain that this message was sent in the context of a game.

We will leave it entirely up to you whether we send this email or not.

Would you want us to send this email to your peers?

- Yes
- No



Since you do not want us to send this email, we want to offer you some money in exchange of sending this email out.

Please let us know the minimum amount of money that you would accept to let us send this email to your peers? Remember it is in your best interest to answer truthfully. If you enter an amount below \$100, there is a chance that we send the email and you get the amount you entered as compensation. However, any amount above \$100 would surely result in no email being sent (but also no compensation).

Remember that your response will be compared to the bid from the computer, so it is in your own interest to report truthfully.

\$



Do you find it uncomfortable to ask information about salary to your peers?

- Not at all
- A little uncomfortable
- Uncomfortable
- Very uncomfortable

If you ask a peer about his or her salary, would you expect this peer to ask you about your salary?

- Yes
- No

Is it socially acceptable to ask someone about their salary?

- Highly unacceptable
- Somewhat unacceptable
- Somewhat acceptable
- Highly acceptable

