S1 Appendix:

## A Variables Definition

| Name | Survey | Question \# | Definition |
| :---: | :---: | :---: | :---: |
| Heads Flipped |  | Q3 | Number of heads reported flipped, ranges from 0 to 10. |
| Male |  | Q8 | $=1$ for male workers. |
| Age |  | Q19 | Reported age of worker. |
| White |  | Q28 | $=1$ for White workers. |
| Black |  | Q28 | $=1$ for Black workers. |
| Hispanic |  | Q28 | $=1$ for Hispanic workers. |
| Asian |  | Q28 | $=1$ for Asian workers. |
| Other |  | Q28 | $=1$ for non White, Black, Hispanic, Asian. |
| USA |  | Q25 | $=1$ for workers living in the U.S.A. |
| Justified Benefits ${ }^{a}$ |  | Q57 | "Is it ever justified to claim government benefits you are not entitled to?" |
| Justified Transport ${ }^{\text {a }}$ |  | Q57 | "Is it ever justified to avoid paying for public transport?" |
| Justified Steal ${ }^{a}$ |  | Q57 | "Is it ever justified to steal?" |
| Justified Taxes ${ }^{a}$ |  | Q57 | "Is it ever justified to cheat on taxes?" |
| Justified Bribe ${ }^{a}$ |  | Q57 | "Is it ever justified to accept a bribe?" |
| Trust People |  | Q41 | Dummy variable $=1$ for workers who think "Most people can be trusted". $=0$ for workers who think you "need to be very careful" in dealing with people. |
| SNAP Cheat |  | Q29 | $=1$ if more than $50 \%$ of food stamp recipients are believed to be "acting fraudulently, or otherwise cheating the U.S. welfare system" |
| Heads Guessed |  | Q30 | "How many heads will the average worker report to have flipped?" Variable ranges from 0 to 10. |
| God |  | Q51 | $=1$ for workers who believe in god. |
| Hell |  | Q52 | $=1$ for workers who believe in hell. 468 |
| No Church |  | Q49 | $=1$ for workers who report going to church "Never, practically never". |
| Low Church |  | Q49 | $=1$ for workers who report going to church "Once a month". |
| Med Church |  | Q49 | $=1$ for workers who report going to church "Once a week". |
| High Church |  | Q49 | $=1$ for workers who report going to church "More than once a week". |
| No Religion |  | Q26 | $=1$ for workers who "Do not belong to a denomination". |
| Hindu |  | Q26 | $=1$ for workers who are Hindu. |
| Muslim |  | Q26 | $=1$ for workers who are Muslim. |
| Jew |  | Q26 | $=1$ for workers who are Jewish. |
| Catholic |  | Q26 | $=1$ for workers who are Catholic. |
| Protestant |  | Q26 | $=1$ for workers who are Protestant. |
| High Income |  | Q21 | $=1$ for workers who report a household income greater than \$99,000. |
| Low Income |  | Q21 | $=1$ for workers who report a household income less than \$30,000. |
| Satisfied Financial ${ }^{\text {b }}$ |  | Q43 | "How satisfied are you with the financial situation of your household?" |
| Satisfied Generally ${ }^{\text {b }}$ |  | Q39 | "How satisfied are you with your life as a whole these days?" |
| Conservative |  | Q22 | $=1$ for workers who report 9 or 10 on a 10 point scale where $1=$ liberal and $10=$ conservative. |
| Liberal |  | Q22 | $=1$ for workers who report 1 or 2 on a 10 point scale where $1=$ liberal and $10=$ conservative. |
| Flipping Time |  | NA | Time to answer the coin flipping question. |
| Duration |  | NA | Total time to complete the survey, less flipping time. |
| $2+3$ Correct |  | Q60 | "What is the number two plus the number three equal to?" |

Note: The online survey that was administered is freely available at https://www.protocols.io/view/
lying-and-shirking-under-oath-bgw7jxhn Survey question numbers listed in the second column correspond to the oath treatment. "Other" includes Hawaiian and Pacific Islander, and non White, Hispanic, Black, and Asian.
a. Answers range from 0 (never justified) to 10 (always justified).
b. Answers range from 1 (not satisfied) to 10 (satisfied).

## B Distribution of flipping times

As discussed in the text, the distribution of flipping time is not affected by signing the oath - resulting in a similar share of quick answers (which we use to classify respondents as shirkers) in both treatments. This is confirmed by the detailed data provided in Table A, which reports the quantiles of the flipping time distribution in each treatment.

Table A. Deciles of the flipping time distribution, by treatment

|  | $Q_{1}$ | $Q_{2}$ | $Q_{3}$ | $Q_{4}$ | $Q_{5}$ | $Q_{6}$ | $Q_{7}$ | $Q_{8}$ | $Q_{9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ | $60 \%$ | $70 \%$ | $80 \%$ | $90 \%$ |
| NoOATH (s) | 7.3 | 11.6 | 16.3 | 25.7 | 40.8 | 54.6 | 65.5 | 84.1 | 116.5 |
| OATH (s) | 7.8 | 12.7 | 17.6 | 27.2 | 42.1 | 55.0 | 69.9 | 85.2 | 121.9 |
| Pooled (s) | 7.6 | 12.1 | 16.8 | 26.7 | 41.3 | 54.8 | 68.2 | 84.8 | 119.1 |

Table Breports the distribution of the share of subjects who report having flipped 10 heads in each treatment as a function of the distribution of flipping times. Two results emerge, which are in line with the conclusions drawn in the text based on the
empirical threshold defining shirkers: first, the share of subjects reporting 10 heads is much higher among respondents whose flipping time is short ( $Q_{1}$ to $Q_{5}$, i.e., subjects who respond in less than 40s). Second, the oath induces a significant decrease in this share at the bottom of the flipping time distribution.

Table B. Share of subjects reporting 10 heads as a function of flipping time

|  | Deciles of the flipping time distribution |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $Q_{1}$ | $Q_{2}$ | $Q_{3}$ | $Q_{4}$ | $Q_{5}$ | $Q_{6}$ | $Q_{7}$ | $Q_{8}$ | $Q_{9}$ | $Q_{10}$ |
| NoOath (\%) | 26.7 | 34.7 | 22.9 | 29.9 | 26.1 | 4.5 | 4.9 | 10.0 | 5.5 | 12.3 |
| Oath (\%) | 22.7 | 31.3 | 20.3 | 17.3 | 18.3 | 3.9 | 3.4 | 3.7 | 1.4 | 6.6 |

## C Distribution of beliefs about the average behavior

Table Creports the observed distribution of beliefs about the average number of heads reported by other respondents in both treatments. The two distributions are statistically similar ( $p=.853$, Kolmogorv-Smirnov test) so that the observed change in behavior induced by the oath cannot be attributed to a change in beliefs.

Table C. Distribution of beliefs about the average behavior

| Average report of others |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| NoOATH (\%) | 0.15 | 0.44 | 1.61 | 4.09 | 33.77 | 15.79 | 16.67 | 13.89 | 5.26 | 8.33 |
| OATH (\%) | 0.15 | 0.44 | 1.61 | 4.11 | 33.87 | 15.84 | 16.72 | 13.93 | 5.28 | 8.36 |

## D Statistical tests supporting Table 4

Table D provides the p-values of the statistical tests reported in Table 4 in the text. The left-hand side reports t-tests of the null hypothesis that the mean report amongst subjects who do not report 10 is equal to 5 . The right-hand side reports the p-values of the equality of outcomes between treatments based on proportion tests in the first and third columns, and two-samples t-tests in the second column.

Table E replicates all statistical tests using (1)approach to correct for multiple testing. Hypotheses are ordered according to their original p-value. Corrected p-values are then computed by weighting the original probabilities based on the total number of hypotheses tested and their rank.

Table D. Statistical tests supporting Table 4

|  | T test of mean equality to 5 <br> NoOATH | OATH |
| :--- | :---: | :---: |
| 30 years old or less | 0.000 | 0.000 |
| Between 31 and 37 | 0.000 | 0.000 |
| More than 38 years old | 0.000 | 0.004 |
| Male | 0.000 | 0.000 |
| Female | 0.000 | 0.000 |
| Race other | 0.304 | 0.029 |
| White | 0.000 | 0.000 |
| Asian | 0.004 | 0.113 |
| Black | 0.077 | 1.000 |
| US citizen | 0.000 | 0.000 |
| Not US citizen | 0.529 | 0.415 |
| Atheist | 0.000 | 0.000 |
| Catholic | 0.000 | 0.000 |
| Protestant | 0.810 | 0.515 |
| Hindu | 0.000 | 0.002 |
| Religion Other | 0.000 | 0.002 |
| Low Income | 0.000 | 0.001 |
| Medium Income | 0.000 | 0.000 |
| High Income | 0.000 | 0.001 |
| Justified Benefits | 0.072 | 0.000 |
| Unjustified Benefits | 0.000 | 0.000 |
| Justified Transport | 0.110 | 0.000 |
| Unjustified Transport | 0.000 | 0.003 |
| Justified Steal | 0.000 | 0.000 |
| Unjustified Steal | 0.000 | 0.000 |
| Justified Taxes | 0.008 | 0.000 |
| Unjustified Taxes | 0.000 | 0.000 |
| Justified Bribe | 0.000 | 0.000 |
| Unjustified Bribe | 0.000 | 0.000 |
| Trust People | 0.000 | 0.000 |
| Do not trust people | 0.000 | 0.000 |
| No Church | 0.000 | 0.000 |
| Low Church | 0.001 | 0.002 |
| Med Church | 0.149 | 0.008 |
| High Church | 0.114 | 0.471 |
|  |  |  |


|  | Differences <br>  <br>  <br> Shirking <br> 10 heads |  |  |
| :--- | :---: | :---: | :---: |
| M0 years old or less | 0.099 | 0.017 | 0.359 |
| Between 31 and 37 | 0.675 | 0.276 | 0.492 |
| More than 38 years old | 0.275 | 0.993 | 0.438 |
| Male | 0.214 | 0.012 | 0.776 |
| Female | 0.859 | 0.705 | 0.525 |
| Race other | 0.648 | 0.023 | 0.599 |
| White | 0.876 | 0.650 | 0.992 |
| Asian | 0.486 | 0.548 | 0.255 |
| Black | 0.855 | 0.581 | 0.168 |
| US citizen | 0.513 | 0.318 | 0.540 |
| Not US citizen | 0.642 | 0.005 | 0.976 |
| Atheist | 0.276 | 0.541 | 0.414 |
| Catholic | 0.754 | 0.135 | 0.940 |
| Protestant | 0.810 | 0.052 | 0.545 |
| Hindu | 0.664 | 0.307 | 0.663 |
| Religion Other | 1.000 | 0.542 | 0.583 |
| Low Income | 1.000 | 0.021 | 0.182 |
| Medium Income | 0.053 | 0.116 | 0.141 |
| High Income | 0.272 | 0.547 | 0.040 |
| Justified Benefits | 0.693 | 0.019 | 0.884 |
| Unjustified Benefits | 0.049 | 0.575 | 0.231 |
| Justified Transport | 0.533 | 0.071 | 0.850 |
| Unjustified Transport | 0.013 | 0.132 | 0.148 |
| Justified Steal | 0.148 | 0.217 | 0.426 |
| Unjustified Steal | 0.005 | 0.042 | 0.091 |
| Justified Taxes | 0.561 | 0.118 | 0.582 |
| Unjustified Taxes | 0.032 | 0.077 | 0.108 |
| Justified Bribe | 0.076 | 0.332 | 0.954 |
| Unjustified Bribe | 0.001 | 0.011 | 0.348 |
| Trust People | 0.217 | 0.344 | 0.922 |
| Do not trust people | 0.978 | 0.027 | 0.241 |
| No Church | 0.234 | 0.171 | 0.346 |
| Low Church | 0.322 | 0.002 | 0.883 |
| Med Church | 0.603 | 0.600 | 0.242 |
| High Church | 0.514 | 1.000 | 0.479 |
|  |  |  |  |

Table E. Replication of Table $D$ with corrected p-values to account for multiple testing

|  | T test of mean equality to 5 <br> NoOATH | OATH |
| :--- | :---: | :---: |


|  | Differences |  |  |
| :--- | :---: | :---: | :---: |
|  | Shirking | 10 heads | Mean |
| 30 years old or less | 0.435 | 0.102 | 0.839 |
| Between 31 and 37 | 0.898 | 0.482 | 0.839 |
| More than 38 years old | 0.645 | 1.000 | 0.839 |
| Male | 0.645 | 0.102 | 0.992 |
| Female | 0.959 | 0.748 | 0.839 |
| Race other | 0.898 | 0.102 | 0.839 |
| White | 0.959 | 0.711 | 0.992 |
| Asian | 0.898 | 0.677 | 0.812 |
| Black | 0.959 | 0.677 | 0.812 |
| US citizen | 0.898 | 0.501 | 0.839 |
| Not US citizen | 0.898 | 0.092 | 0.992 |
| Atheist | 0.645 | 0.677 | 0.839 |
| Catholic | 0.943 | 0.279 | 0.992 |
| Protestant | 0.959 | 0.167 | 0.839 |
| Hindu | 0.898 | 0.501 | 0.893 |
| Religion Other | 1.000 | 0.677 | 0.839 |
| Low Income | 1.000 | 0.102 | 0.812 |
| Medium Income | 0.307 | 0.276 | 0.812 |
| High Income | 0.645 | 0.677 | 0.812 |
| Justified Benefits | 0.898 | 0.102 | 0.992 |
| Unjustified Benefits | 0.307 | 0.677 | 0.812 |
| Justified Transport | 0.896 | 0.207 | 0.992 |
| Unjustified Transport | 0.149 | 0.279 | 0.812 |
| Justified Steal | 0.576 | 0.399 | 0.839 |
| Unjustified Steal | 0.080 | 0.146 | 0.812 |
| Justified Taxes | 0.898 | 0.276 | 0.839 |
| Unjustified Taxes | 0.281 | 0.208 | 0.812 |
| Justified Bribe | 0.379 | 0.501 | 0.992 |
| Unjustified Bribe | 0.021 | 0.102 | 0.839 |
| Trust People | 0.645 | 0.501 | 0.992 |
| Do not trust people | 1.000 | 0.104 | 0.812 |
| No Church | 0.645 | 0.332 | 0.839 |
| Low Church | 0.705 | 0.074 | 0.992 |
| Med Church | 0.898 | 0.677 | 0.812 |
| High Church | 0.898 | 1.000 | 0.839 |
|  |  |  |  |

1. Benjamini Y, Hochberg Y. Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing. Journal of the Royal Statistical Society Series B (Methodological). 1995;57(1):289-300.
