

# Measuring the Effects of Unfair Employer Behavior on Worker Productivity – A Field Experiment

## ONLINE APPENDIX

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### Abstract

This Online Appendix contains additional results, robustness checks, and materials. In Section A.1, we display a cumulative density function showing how worker performance changes between the first and second shift. In Section A.2, we rerun specification 4 of our cluster standard errors on the shift level. In Section A.3, we re-run the baseline regressions (Table 2 in the paper) for several variations of our main outcome measure. In Section A.4, we re-run the baseline regression using a number of alternative outcome measures. In Section A.5, we re-run the baseline regression using our main outcome variable and all alternative outcomes measures, using the No-layoff treatment as the baseline. In Section A.6, we consider the probability of conducting an interview as outcome measure. In Section A.7, we compare the performance of the laid-off and the remaining workers in the first shift of the Layoff treatment. In Section A.8, we present the baseline regression with controls for spillover effects. Section A.9 contains the job advertisement, Section A.10 the interview questions, Section A.11 the follow-up survey questions, and Section A.12 the debriefing survey questions. In Section A.13, we show pictures of a workplace and the call-center.

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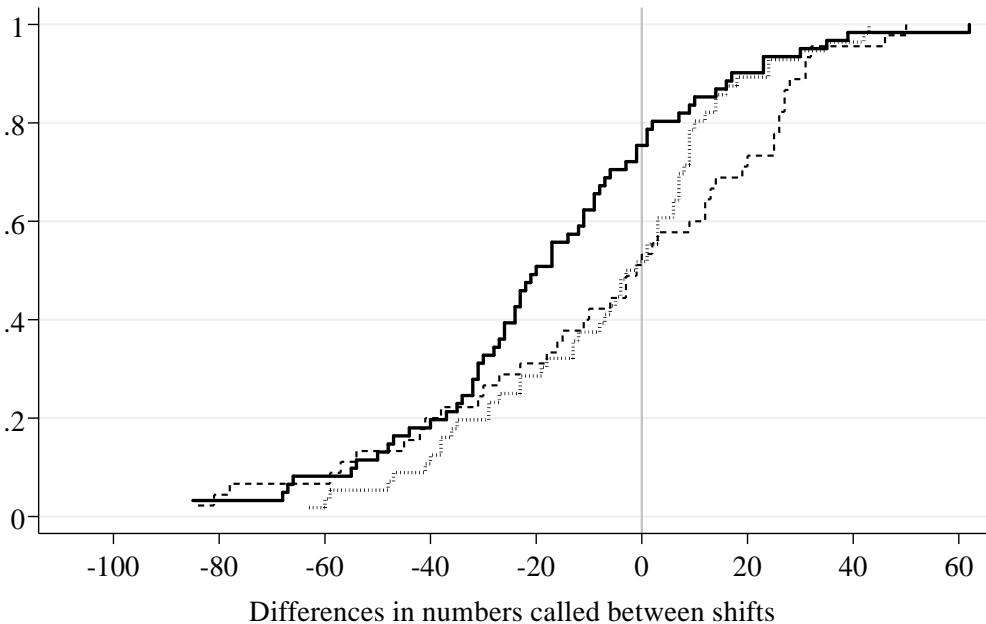
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**A.1 Cumulative density function of worker performance**

The cumulative distribution displayed in Figure A.1 shows how worker performance changes between the first and second shift.

**Figure A.1: Cumulative distribution of the differences in numbers called between second and first shift**



## A.2 Clustering standard errors on the shift level and changing the baseline treatment

In our baseline regression (Table 2), we cluster standard errors on the subject and time of day level (two-way clustering). As a robustness check, we re-run our generalized difference-in-difference estimation, clustering standard errors on the shift level. As shown in Table A, the main qualitative results are the same. Note that the results in Table A are conservative estimates, as our working environment makes social interaction between workers in the same shift unlikely (see Section 2.1). Indeed, we find no evidence for significant social interaction within shifts (see Section 3.4).

**Table A: Baseline Regression  
(specification 4), Clustering  
Standard Errors on the Shift Level**

	<b>Numbers called <math>s_2</math></b>
Constant	18.564* (9.364)
No-layoff	-0.217 (8.361)
Layoff	-10.079* (5.558)
Numbers called $s_1$	0.715*** (0.099)
$R^2$	0.270
Sample size	162
Subject characteristics	No
Point in time	No

Similar regression as in Table 2, specification 4. Standard errors are clustered on the shift level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

### A.3 Varying definitions of our main outcome measure

In our baseline regression (Table 2), we only counted phone calls where the call time was at least 15 seconds (if no client/answering device picked up the phone in the meantime). As a robustness check, we re-run our baseline regression using two alternative thresholds. First, we count all phone calls irrespective of the call time; and second, we set the threshold to 30 seconds. As shown in the Tables B and C, changing the threshold does not affect our main results.

**Table B: Baseline Regression: No Call Time Threshold**

Specification	Number of calls			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	91.893*** (3.248)	49.341*** (17.822)	-10.615 (30.487)	23.965** (10.700)
t	-5.607* (3.248)	-5.607* (3-352)	-10.212 (7.406)	
No-layoff	-1.693 (4.571)	-2.843 (4.890)	2.721 (12.656)	3.351 (5.578)
No-layoff $\times$ t	3.896 (5.656)	3.896 (5.793)	9.446 (14.210)	
Layoff	4.255 (4.341)	2.445 (4.396)	6.640 (7.092)	-11.286* (5.105)
Layoff $\times$ t	-12.655** (5.458)	-12.655** (5.504)	-21.456** (8.056)	
Numbers called $s_1$				0.678*** (0.110)
$R^2$	0.044	0.116	0.257	0.246
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2. We count all phone calls, irrespective of the call time. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table C: Baseline Regression: Call Time > 30 Seconds**

Specification	Number of calls			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	84.089*** (3.675)	40.753** (19.230)	11.443* (7.409)	16.487* (8.023)
t	-8.679** (3.350)	-8.679* (3.437)	-11.443 (7.409)	
No-layoff	-2.312 (4.814)	-3.728 (5.238)	-12.822 (11.736)	-0.858 (5.650)
No-layoff $\times$ t	-0.166 (5.765)	-0.166 (5.926)	-8.495 (12.799)	
Layoff	3.075 (4.755)	1.666 (4.670)	1.948 (8.675)	-9.991** (4.924)
Layoff $\times$ t	-10.912** (5.219)	-10.911** (5.226)	-15.205*** (7.752)	
Numbers called $s_1$				0.701*** (0.087)
$R^2$	0.058	0.151	0.270	0.286
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2. Here we only count phone calls if the call time was at least 30 seconds (if no client/answering device picked up the phone in the meantime). \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

#### **A.4 Alternative outcome measures**

In this section, we use a number of alternative outcome measures as dependent variable in our baseline regression. First, we use the total time spent on the phone. Second, we use the number of self-reported phone calls. Since workers self-report whether they have dialed existing or non-existing phone numbers, we run two separate estimations. In the first estimations, we only include self-reported existing phone numbers; in the second estimations, we additionally include non-existing phone numbers. Moreover, in our regressions with self-reported phone calls, we include the self-reported phone calls from the seven workers from the No-layoff treatment that we dropped in our baseline regression. Third, we use the number of calls divided by the total time workers spent on the phone, excluding all phone calls that resulted in an interview. Fourth, we use the gross working time, i.e., the duration between the start of the first phone call and the end of the last phone call that a worker conducted in a given shift. Fifth, we use the number of self-reported interviews.<sup>6</sup>

In Tables D to I, we present the regression results. The main results are mostly the same as in our baseline regressions. There are two exceptions. First, when we use the self-reported number of interviews as dependent variable, we find that our treatment effect is not always statistically significant at conventional significance levels (the p-values of our main coefficient of interest in the respective estimations lie between 0.11 and 0.16). However, the statistical power in these estimations is quite low since the variance in the number of interviews is large. Second, when we use the normalized number of calls, our treatment effect increases to 18 percent. Hence, our treatment effect of 12 percent discussed in the paper seems to be a conservative estimate. We conclude from these checks that our main results are robust.

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<sup>6</sup> The interviews are self-reported, and we do not know whether a worker has really interviewed a client or faked an interview. However, based on the IT data from the call-center, we can check how long a worker has talked to a client on the phone. We find that most workers talk to a client between five and seven minutes when an interview is reported. In 5 percent of all self-reported interviews, we find that workers talked less than one minute to the client. It is unlikely that workers could conduct a full interview in less than a minute. Hence, we suspect that in such cases the worker faked an interview (or indicated a wrong outcome). We find that only a very small number of workers are responsible for the interviews that are likely to have been faked (the number is similar in all treatments). If we exclude those workers or if we exclude all interviews that did not last longer than one minute, our main regression results remain unchanged.

**Table D: Baseline Regression: Total Time Spent on the Phone**

Specification	Total time spent on the phone			Working time $s_2$
	(1)	(2)	(3)	(4)
Constant	91.794*** (3.378)	42.626** (18.717)	-2.755 (27.281)	5.814 (8.922)
t	-14.837*** (2.606)	-14.837*** (2.695)	-20.376*** (5.741)	
No-layoff	-7.017 (4.825)	-5.746 (5.049)	9.977 (12.132)	0.856 (5.154)
No-layoff $\times$ t	2.435 (5.273)	2.435 (5.391)	11.042 (12.589)	
Layoff	-0.514 (4.584)	-0.026 (4.522)	-3.889 (7.578)	-11.708*** (4.324)
Layoff $\times$ t	-11.592** (4.814)	-11.592** (4.826)	-11.789* (6.152)	
Working time $s_1$				0.775*** (0.092)
$R^2$	0.118	0.223	0.330	0.382
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table 2. The dependent variable is the number of minutes a worker spent on the phone. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table E: Baseline Regression: Number of Calls (self-reported)**

Specification	Self-reported numbers called (existing and non-existing numbers)			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	238.679*** (9.189)	219.529*** (49.933)	159.957*** (54.842)	98.776*** (22.546)
t	-3.214 (7.834)	-3.214 (7.983)	0.449 (20.382)	
No-layoff	-7.933 (12.226)	-10.068 (12.427)	13.366 (27.701)	3.707 (13.034)
No-layoff $\times$ t	7.097 (13.480)	7.097 (13.802)	11.381 (33.549)	
Layoff	4.521 (12.618)	0.616 (12.758)	19.213 (17.093)	-32.870** (11.950)
Layoff $\times$ t	-34.802*** (13.336)	-34.802** (13.396)	-73.430*** (24.890)	
Numbers called $s_1$				0.573*** (0.089)
$R^2$	0.032	0.077	0.227	0.258
Sample size	334	334	334	167
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2, except that we use the self-reported amount of dialed numbers (irrespective of whether the number exists or not) as dependent variable. We dropped two observations from our Layoff treatment – one worker failed to self-report her phone calls in the first shift, and one worker failed to report them in the second shift. We include the self-reported amount of phone calls from the seven subjects from our No-layoff treatment that we dropped in our baseline regressions in the paper. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



**Table F: Baseline Regression: Number of Calls (self-reported)**

Specification	Self-reported numbers called (only existing numbers)			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	106.107*** (3.911)	92.154*** (24.620)	83.493*** (31.508)	37.443* (17.031)
t	-4.661 (4.334)	-4.661 (4.447)	-7.231 (8.481)	
No-layoff	-1.244 (5.435)	-2.287 (5.427)	-0.140 (15.389)	6.598 (8.124)
No-layoff $\times$ t	7.092 (8.361)	7.093 (8.527)	16.540 (23.318)	
Layoff	-1.190 (5.404)	-2.389 (5.510)	2.157 (7.882)	-14.628** (6.003)
Layoff $\times$ t	-14.156** (6.412)	-14.156** (6.450)	-28.833*** (9.304)	
Numbers called $s_1$				0.603*** (0.179)
$R^2$	0.042	0.085	0.216	0.207
Sample size	334	334	334	167
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table E, except that we only include existing phone numbers. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table G: Baseline Regression: Number of Calls (normalized)**

Specification	Numbers called (normalized)			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	0.540*** (0.029)	0.286* (0.148)	-0.289 (0.247)	0.191*** (0.055)
t	-0.046* (0.026)	-0.046* (0.027)	-0.064 (0.060)	
No-layoff	-0.021 (0.040)	-0.031 (0.042)	0.145 (0.094)	-0.007 (0.046)
No-layoff $\times$ t	0.009 (0.047)	0.009 (0.048)	-0.065 (0.111)	
Layoff	0.034 (0.039)	0.019 (0.040)	0.040 (0.067)	-0.081** (0.038)
Layoff $\times$ t	-0.096** (0.043)	-0.096** (0.043)	-0.140** (0.064)	
Numbers called $s_1$				0.560*** (0.095)
$R^2$	0.043	0.095	0.231	0.226
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2, except that we use the number of calls divided by the total time workers spent on the phone (excluding all phone calls that resulted in an interview) as dependent variable. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table H: Baseline Regression: Gross Working Time**

Specification	Gross working time			Working time $s_2$
	(1)	(2)	(3)	(4)
Constant	208.510*** (1.352)	178.468*** (18.135)	155.040*** (26.195)	186.307*** (59.484)
t	-9.997*** (3.859)	-9.997** (3.975)	-14.960* (8.056)	
No-layoff	-2.420 (1.953)	-0.846 (2.587)	2.461 (7.120)	-4.031 (6.947)
No-layoff $\times$ t	-1.753 (6.894)	-1.753 (7.014)	6.773 (9.743)	
Layoff	-2.011 (1.839)	-1.017 (2.311)	5.416 (5.597)	-23.343*** (7.452)
Layoff $\times$ t	-21.449*** (7.291)	-21.449*** (7.374)	-33.994*** (8.729)	
Numbers called $s_1$				0.058 (0.276)
$R^2$	0.153	0.194	0.324	0.226
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2, except that we use the duration between the start of the first phone call and the end of the last phone call that a worker conducts in a given shift as dependent variable. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table I: Baseline Regression: Number of Interviews**

Specification	Self-reported number of interviews			Number of interviews $s_2$
	(1)	(2)	(3)	(4)
Constant	5.286*** (0.270)	2.561* (1.373)	-0.089 (2.252)	2.998*** (0.419)
t	-0.643** (0.316)	-0.643** (0.321)	-0.922 (0.732)	
No-layoff	-0.486 (0.457)	-0.416 (0.444)	0.033 (0.752)	-0.114 (0.433)
No-layoff $\times$ t	0.221 (0.548)	0.221 (0.557)	1.474 (1.231)	
Layoff	-0.122 (0.457)	-0.037 (0.430)	-0.526 (0.696)	-0.769** (0.371)
Layoff $\times$ t	-0.685 (0.493)	-0.685 (0.491)	-0.526 (0.767)	
Number of interviews $s_1$				0.311*** (0.067)
$R^2$	0.046	0.110	0.201	0.127
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2, except that we use the number of self-reported interviews as dependent variable. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

### A.5 Using the No-layoff treatment as the baseline treatment

In our baseline regression (Table 2) and in all robustness checks presented above, we use the Quasi-layoff treatment as the baseline. As a robustness check, we re-run our regressions, using the No-layoff treatment as the baseline treatment. We present the results for our main outcome measure (number of calls; see Table J) as well as for all alternative outcome measures presented in Section A.5 (see Table K-P). The main qualitative results are the same.

**Table J: Baseline Regression: Number of Calls (baseline: No-layoff treatment)**

Specification	Number of calls			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	87.422*** (3.261)	53.739*** (21.532)	-12.829 (33.883)	18.348* (9.461)
t	-6.556 (5.161)	-6.556 (5.306)	-14.736 (12.965)	
Quasi-layoff	1.506 (4.854)	2.378 (5.236)	-17.311 (11.726)	-0.217 (6.014)
Quasi-layoff $\times$ t	-0.212 (6.184)	-0.212 (6.734)	4.602 (13.450)	
Layoff	5.037 (4.310)	4.483 (4.565)	-10.986 (12.345)	-9.862 (6.208)
Layoff $\times$ t	-11.297* (6.623)	-11.297** (6.734)	-14.100 (13.688)	
Numbers called $s_1$				0.715*** (0.094)
$R^2$	0.044	0.108	0.251	0.270
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table 2. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table K: Baseline Regression: Total Time Spent on the Phone  
(baseline: No-layoff treatment)**

Specification	Total time spent on the phone			Working time $s_2$
	(1)	(2)	(3)	(4)
Constant	84.777*** (3.446)	36.880*** (19.938)	7.221 (30.548)	6.670 (8.563)
t	-12.402*** (4.584)	-12.402*** (4.669)	9.334 (12.642)	
Quasi-layoff	7.017 (4.825)	5.746 (5.049)	-9.977 (12.132)	0.856 (5.154)
Quasi-layoff $\times$ t	-2.435 (5.273)	-2.435 (5.391)	-11.042 (12.589)	
Layoff	6.504 (4.635)	5.720 (4.820)	-13.866 (13.030)	-12.563** (5.550)
Layoff $\times$ t	-14.027** (6.115)	-14.027** (4.820)	-22.831* (13.696)	
Working time $s_1$				0.775*** (0.092)
$R^2$	0.118	0.223	0.330	0.374
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table D. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table L: Baseline Regression: Number of Calls (self-reported; baseline: No-layoff treatment)**

Specification	Self-reported numbers called (existing and non-existing numbers)			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	230.745*** (8.066)	209.431*** (50.438)	173.323*** (54.963)	102.483*** (22.698)
t	3.882 (10.970)	3.882 (11.259)	11.830 (28.607)	
Quasi-layoff	7.933 (12.226)	10.098 (12.427)	-13.366 (27.701)	-3.707 (13.034)
Quasi-layoff $\times$ t	-7.097 (13.480)	-7.097 (13.802)	-11.381 (33.549)	
Layoff	12.455 (11.825)	10.714 (12.082)	5.846 (29.189)	-36.577*** (13.803)
Layoff $\times$ t	-41.899*** (15.389)	-41.899*** (15.572)	-85.811** (34.963)	
Numbers called $s_1$				0.573*** (0.089)
$R^2$	0.032	0.077	0.227	0.258
Sample size	334	334	334	167
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table E. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table M: Baseline Regression: Number of Calls (self-reported; baseline: No-layoff treatment)**

Specification	Self-reported numbers called (only existing numbers)			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	104.863*** (3.773)	89.867*** (24.366)	83.354*** (26.289)	44.046** (21.344)
t	2.431 (7.136)	-2.431 (7.275)	9.309 (23.888)	
Quasi-layoff	1.244 (5.433)	2.287 (5.427)	0.140 (15.389)	-6.598 (8.124)
Quasi-layoff $\times$ t	-7.092 (8.361)	-7.093 (8.527)	-16.540 (23.318)	
Layoff	0.054 (5.306)	-0.102 (5.533)	2.296 (15.774)	-21.227** (7.809)
Layoff $\times$ t	-21.248** (8.532)	-21.248** (8.683)	-45.372*** (24.621)	
Numbers called $s_1$				0.603*** (0.179)
$R^2$	0.042	0.085	0.216	0.207
Sample size	334	334	334	167
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table F. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



**Table N: Baseline Regression: Number of Calls (normalized; baseline: No-layoff treatment)**

Specification	Numbers called (normalized)			Numbers called $s_2$
	(1)	(2)	(3)	(4)
Constant	0.519*** (0.026)	0.255* (0.153)	-0.144 (0.256)	0.184*** (0.060)
t	-0.037 (0.039)	-0.037 (0.040)	-0.129 (0.110)	
Quasi-layoff	-0.021 (0.040)	0.031 (0.042)	-0.145 (0.094)	0.007 (0.046)
Quasi-layoff $\times$ t	0.021 (0.040)	-0.009 (0.048)	0.065 (0.111)	
Layoff	0.055 (0.037)	0.051 (0.040)	-0.105 (0.096)	-0.073 (0.046)
Layoff $\times$ t	-0.105** (0.052)	-0.105** (0.052)	-0.075 (0.113)	
Numbers called $s_1$				0.560*** (0.095)
$R^2$	0.043	0.095	0.231	0.226
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table G. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table O: Baseline Regression: Gross Working Time (baseline: No-layoff treatment)**

Specification	Gross working time			Working time $s_2$
	(1)	(2)	(3)	(4)
Constant	206.090*** (1.409)	177.621*** (18.031)	157.502*** (25.840)	182.277*** (58.282)
t	-11.749** (5.713)	-11.749* (5.779)	-8.187 (8.104)	
Quasi-layoff	2.420 (1.952)	0.846 (2.587)	-2.461 (7.120)	4.031 (6.947)
Quasi-layoff $\times$ t	1.753 (6.894)	1.753 (7.014)	-6.773 (9.684)	
Layoff	0.408 (1.881)	-0.171 (2.391)	2.954 (8.131)	-19.312** (8.224)
Layoff $\times$ t	-19.697** (8.421)	-19.697** (8.484)	-39.867*** (13.151)	
Numbers called $s_1$				0.059 (0.276)
$R^2$	0.153	0.194	0.324	0.226
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table H. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table P: Baseline Regression: Number of Interviews (baseline: No-layoff treatment)**

Specification	Self-reported number of interviews			Number of interviews $s_2$
	(1)	(2)	(3)	(4)
Constant	4.800*** (0.368)	2.144 (1.376)	-0.056 (2.258)	2.884*** (0.508)
t	-0.422 (0.447)	-0.422 (0.455)	0.552 (1.193)	
Quasi-layoff	0.486 (0.457)	0.416 (0.444)	-0.033 (0.752)	0.114 (0.433)
Quasi-layoff $\times$ t	-0.221 (0.548)	-0.221 (0.557)	-1.474 (1.231)	
Layoff	0.364 (0.497)	0.380 (0.743)	-0.540 (0.812)	-0.655 (0.465)
Layoff $\times$ t	-0.906 (0.586)	-0.906 (0.587)	-2.000 (1.282)	
Number of interviews $s_1$				0.311*** (0.067)
$R^2$	0.046	0.110	0.201	0.127
Sample size	324	324	324	162
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar OLS regressions as in Table I. The baseline is the No-layoff treatment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## A.6 Qualitative performance measure: Probability of conducting an interview

In this section, we use the probability of conducting an interview as dependent variable in our regressions. The probability is the self-reported number of interviews divided by the self-reported number of phone calls in which a client picked up the phone. In the regressions, we use a “restricted” and an “expanded” sample. In the “restricted” sample, we dropped two observations from the Layoff treatment – one worker failed to self-report her phone calls in the first shift, and one worker failed to report them in the second shift. In the “expanded” sample, we use the same data as in the “restricted” sample, but we additionally include the self-reported phone calls from the seven workers from our No-layoff treatment that we dropped in our baseline regressions (Table 2) in the paper.

**Table Q: Baseline Regression: Share of Conducted Interviews**

Specification	Share of conducted interviews			Share
	(1)	(2)	(3)	$s_2$
				(4)
Constant	0.180*** (0.013)	0.113* (0.061)	0.177** (0.072)	0.156*** (0.021)
t	0.024 (0.018)	0.024 (0.019)	0.005 (0.039)	
No-layoff	-0.014 (0.018)	-0.004 (0.018)	-0.009 (0.028)	-0.046** (0.021)
No-layoff $\times$ t	-0.036 (0.025)	-0.036 (0.025)	0.013 (0.047)	
Layoff	-0.003 (0.019)	0.007 (0.019)	-0.025 (0.031)	-0.050** (0.020)
Layoff $\times$ t	-0.047* (0.025)	-0.047* (0.025)	-0.022 (0.047)	
Conducted interviews $s_1$				0.266*** (0.078)
$R^2$	0.028	0.094	0.186	0.108
Sample size	320	320	320	160
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table 2, except that the dependent variable is the self-reported number of interviews divided by the self-reported number of calls in which a client picked up the phone. We dropped two observations from our Layoff treatment – one worker failed to self-report her phone calls in the first shift and one worker failed to report them in the second shift. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table R: Baseline Regression: Share of Conducted Interviews  
(expanded sample)**

Specification	Share of conducted interviews			Share
	(1)	(2)	(3)	$s_2$
Constant	0.180*** (0.013)	0.118* (0.060)	0.110 (0.076)	0.162*** (0.020)
t	0.024 (0.018)	0.024 (0.019)	0.006 (0.039)	
No-layoff	-0.017 (0.018)	-0.009 (0.017)	-0.016 (0.035)	-0.042** (0.021)
No-layoff $\times$ t	-0.029 (0.025)	-0.029 (0.025)	0.023 (0.052)	
Layoff	-0.003 (0.019)	0.007 (0.019)	-0.026 (0.031)	-0.050*** (0.020)
Layoff $\times$ t	-0.047* (0.025)	-0.047* (0.025)	-0.022 (0.047)	
Conducted interviews $s_1$				0.234*** (0.077)
$R^2$	0.027	0.089	0.178	0.092
Sample size	334	334	334	167
Subject characteristics	No	Yes	Yes	No
Point in time	No	No	Yes	No

Similar regressions as in Table J, except that we additionally include the self-reported share of conducted interviews from the seven observations from our No-layoff treatment that we dropped in our baseline regressions in the paper. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

### A.7 Performance of laid-off and remaining workers (during the first shift)

Table S shows the first-shift performance of laid-off workers and remaining workers in the Layoff treatment.

**Table S: Performance in First Shift of Remaining Workers in Layoff Treatment and Laid-off Workers in Layoff / Quasi-layoff Treatment**

Specification	Remaining workers (n=61)	Laid off workers (n=26)	Remaining vs. laid off workers p-value
Time spent on phone (in minutes)	91.0 (25.2)	88.4 (23.1)	0.438
Numbers called (call time > 15 seconds)	92.3 (22.9)	82.6 (32.5)	0.172
Gross working time (in minutes)	206.0 (9.0)	198.9 (33.8)	0.109
Amount of dialed numbers (self-reported; existing & non-existing)	243.2 (66.9)	241.4 (65.1)	0.908
Amount of dialed numbers (self-reported; only existing numbers)	104.9 (28.8)	109.5 (34.0)	0.524
Number of interviews (self-reported)	5.1 (2.6)	4.3 (2.4)	0.156
Number of interviews (self-reported; call-time > one minute)	4.8 (2.6)	4.2 (2.4)	0.294
Share of conducted interviews (in percent)	17.6 (11.2)	15.5 (10.8)	0.434

Self-reported amount of dialed numbers: We dropped one observation in the Layoff treatment. The subject did not make notes about her phone calls on the list in the first shift.

## A.8 Controlling for spillover effects

In Table T, we re-run our baseline regression (Table 2) and interact our treatment dummies (or shift dummies) with a dummy capturing whether a subject knew another worker from another treatment.

**Table T: Baseline Regression, Controlling for Spillovers**

Specification	Number of calls	
	(1)	(2)
Constant	87.068*** (4.050)	86.006*** (7.650)
t	-4.690 (4.872)	-5,438 (4.813)
No-layoff	-1,802 (5.693)	0,142 (6.068)
No-layoff $\times$ t	-7,497 (8.884)	-6,156 (8.997)
Layoff	5,391 (4.943)	5,394 (4.653)
Layoff $\times$ t	-13.163** (6.417)	-12.415** (6.413)
R <sup>2</sup>	0.068	0.118
Sample size	268	268
Spillover	Yes	Yes
Subject characteristics	No	Yes

Similar regressions as in specification 1 and 2 of the Tables 2; we additionally include (i) an interaction term of our Quasi-layoff treatment dummy and a spillover dummy; and (ii) an interaction term of our No-layoff treatment dummy and a spillover dummy. The spillover dummy is set to one if a worker mentions the name of at least one co-worker from another treatment in the debriefing (zero otherwise). Workers who did not participate in the debriefing are excluded. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

## A.9 Job advertisement (translated from German)

# Telefonstudio Saar

As part of a **representative nationwide demographic survey**, to be conducted in our telephone studio in Saarbrücken/Saarterrassen, we are looking with immediate effect for several

## Telephone interviewers (m/f) (expense allowance of 2 x 40 €)

As part of a large-scale scientific study, the *Telefonstudio Saar* is investigating the subjective opinions of the German population on the current refugee debate, in particular on the topics of integration and voluntary work. They are in no way meant as sales talks or customer recruitment; rather, they are exclusively about the opinions of the population. You telephone via a headset and tick the answers on a questionnaire. The interview partners are selected at random.

We are looking with immediate effect for several interviewers (m/f) who would like to help us out, in return for an allowance of **2 x 40 €**. No specific previous knowledge is required. For instance, students, pupils aged 18 and over, housewives, pensioners, job seekers or employees who would like to earn some extra money can register. The day and time of the assignment can be chosen flexibly. Two shifts of four hours each are envisaged (no further employment is possible in our organization). Our shift system allows a starting time at 8.00 am, 12.00 pm, or 4.00 pm. We work Mondays to Saturdays. The location is the [TELEPHONE STUDIO], a modern telephone studio in the Saarterrassen, at [ADDRESS]. The studio can be easily reached by public transport ([TRAIN STATION] is directly opposite) and by car (parking is available at [CAR PARK]).

Do you have a pleasant telephone manner, are you reliable, and do you speak German well?

Then we look forward to receiving your application at [www.telefonstudio-saar.de](http://www.telefonstudio-saar.de)



Scan this QR code to get to the application form!

Note: In the job posting we announced that we envisage that each shift would last four hours. This number included the actual working time and the expected time for the administrative burden (e.g., for registration and payment of the workers).



## **A.10 Phone interview questions (translated from German)**

In the section, we provide a translation of our nationwide survey on refugee integration and engagement in volunteering.

1. We start with your opinion on the aid the German government is providing to integrate refugees into the German society. In your opinion, should this government aid be extended, remain the same, or be reduced? [Answer options: should be extended, should remain the same, should be reduced]
2. When it comes to the topic of refugees, do you worry about your economic situation? [Answer options: worry a lot; worry a bit; do not worry at all]
3. When it comes to the topic of refugees, do you worry about the evolution of crime in Germany? [Answer options: worry a lot; worry a bit; do not worry at all]
4. When it comes to the topic of refugees, do you worry about social cohesion? [Answer options: worry a lot; worry a bit; do not worry at all]
5. When it comes to the topic of refugees, do you worry about the migration to Germany? [Answer options: worry a lot; worry a bit; do not worry at all]
6. If someone does me a favor, I am willing to return this favor in kind. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
7. If I suffer from serious injustice, I would take revenge at any price at the next opportunity. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
8. If someone puts me in difficult conditions, I will do the same with this person. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
9. I exert serious effort to help someone who helped me in the past. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
10. If someone insults me, I will be offensive towards this person. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
11. I am willing to incur costs to help someone who helped me in the past. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
12. We return to the refugee topic. With how many refugees or refugee families did you interact on a personal level in the last six months? [Indicate number]
13. Are you supporting refugees or have you been supporting refugees on a voluntary basis in the last six months? [Answer options: yes; no]

14. I am confident that the refugee integration will succeed in Germany. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
15. The integration of refugees matters to me. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
16. It matters to me that we develop a common sense for how we can live together as a society. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
17. I would be willing to contribute financially to the integration of refugees. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
18. I could imagine getting to know and supporting a refugee family from my region. [Answer on a scale between 1 (does not apply at all) and 7 (fully applies)]
19. There are many opportunities to help refugees. Since recently, there also is a webpage that allows you to register your offer to help refugees – free of charge and without any commitment. Charity organizations may request it on demand. Examples are shoes that you no longer use or the voluntary assistance with administrative issues. If you would like to know more about this, I can give you more information. [Answer options: Want to know internet address; want to know phone number; no interest]
20. In which year were you born? [Indicate year of birth]
21. Are you the last person in your household who celebrated his/her birthday? [Answer options: yes; no]
22. What is currently your professional situation? [Answer options: employed; student; vocational training; retiree; unemployed; other]
23. What is your educational background? [Answer options: completed primary school; secondary school certificate; general qualification for university entrance; university degree; still in school; other]
24. Were both of your parents born in Germany? [Answer options: yes; no]

### **A.11 Follow-up survey – wording and order of questions used in the paper (translated from German)**

On a scale of 0 (“not satisfied at all”) to 10 (“very satisfied”), how satisfied were you with the  
... working atmosphere in the call-center?  
... the wage?  
... the manager’s behavior towards you?  
... the manager’s behavior towards your colleagues?

On a scale of 0 (“do not agree”) to 10 (“fully agree”): How well do the following statements describe your work as an interviewer at the call center?

(...)

“I worked less in the second shift since my colleagues and I already performed very well in the first shift, so we could relax a bit.”

### **A.12 Debriefing – wording and order of questions used in the paper (translated from German)**

Think of the survey on refugees in which you participated as an interviewer. In your opinion, how important were the interviews for the employer, on a scale of 1 (not important at all) to 10 (very important)?

How competent was the management at the call-center, on a scale of 1 (not competent at all) to 10 (highly competent)?

*After this question, we informed the subjects that the project in Telefonstudio Saar was part of an experiment.*

*Additional question in the Quasi-Layoff treatment:* Be honest: What did you think in the Telefonstudio Saar when you were told that there will be 20 percent less staff?

*Additional question in the Layoff treatment:* In the Telefonstudio Saar, the organizers of the telephone survey informed you that they had laid-off a number of employees and that this had enabled them to save costs. They also told you that the selection of staff who would be laid-

off was random. Please, indicate to which extent you perceived the following parts of the message as anti-social, on a scale between 1 (not anti-social et all) to 10 (very anti-social): (i) the layoffs per se, (ii) layoffs to reduce costs, (iii) cost savings per se, and (iv) the random selection of workers.

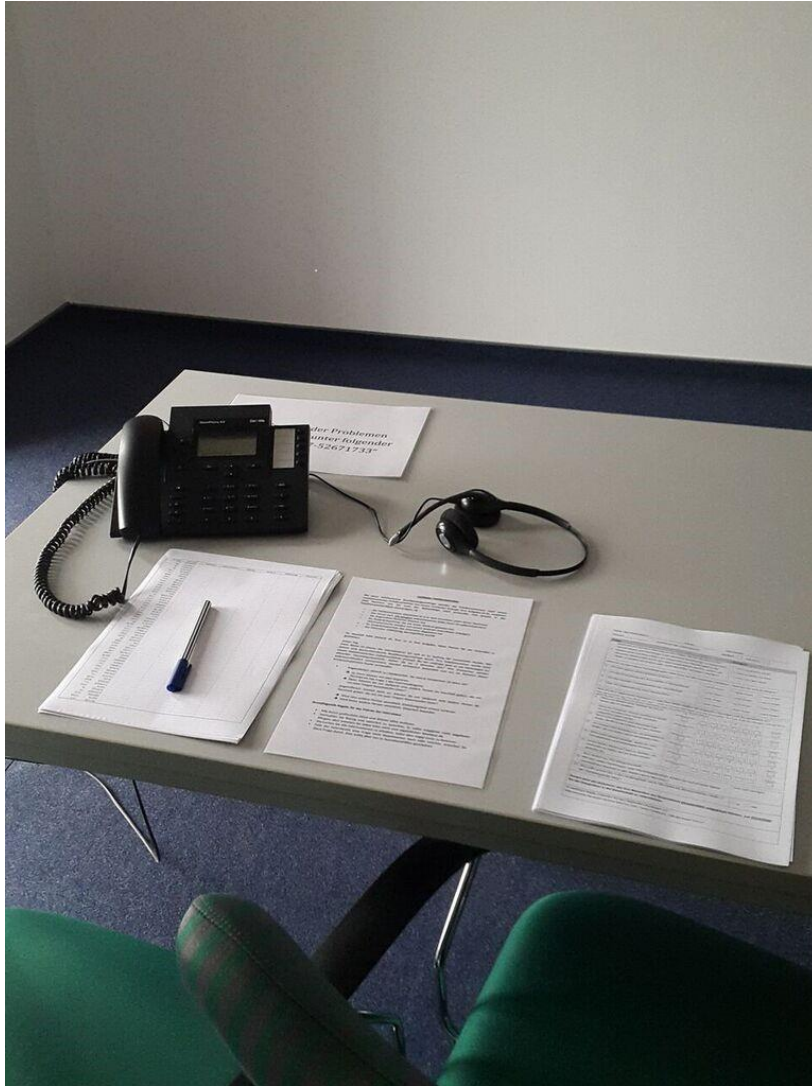
You took part as an interviewer in a telephone survey at the Telefonstudio Saar. However, as we explained earlier, we conducted an additional study behind the scenes in order to investigate what happens when colleagues are treated unfairly by the employer. In the Telefonstudio Saar, did you notice that you were also taking part – during the telephone survey – in an experiment? YES / NO

The organizers of the telephone survey truthfully informed you in advance of your employment in the call-center, and on site, that there will be no further employment at the Telefonstudio Saar after the telephone survey. Did you find this credible? YES / NO

Do you know any other interviewers who worked in the call-center for the Telefonstudio Saar? If yes, can you name them? We will compare your answers with our list of workers. For each correct name of a colleague that you can give us, you will receive 0.50 Euros in addition to the 10 Euros.

## A.13 Pictures

**Figure A.2: Workplace in the Call-Center**



**Figure A.3: Floor to Offices in the Call-Center**

