

Fostering Voluntary Contributions to a Public Good
A Large-Scale Natural Field Experiment at Wikipedia

ONLINE APPENDIX

ONLINE APPENDIX A:

TABLE A1 – EXPERIMENTAL IMPLEMENTATION

Cohort	New accounts	1st time-contributors	1st time-contributors of article content	STEP 1: AUTOMATIC FILTER	Remaining	STEP 2: SCREENING w/ RULEBOOK	Remaining for random selection	Accounts blocked after awarding date (TG/CG)	STEP 3: RANDOM ALLOCATION TG* / CG*
1 (Sep12)	7,187	3,202	2,662	-2,177	485	-122	363	10 (3/7)	147 / 206
2 (Oct12)	7,917	3,567	2,931	-2,590	341	-44	297	6 (3/3)	147 / 144
3 (Nov12)	9,088	3,739	3,016	-2,587	429	-39	390	12 (4/8)	146 / 232
4 (Dec12)	7,663	3,178	2,629	-2,194	435	-78	357	8 (5/3)	145 / 204
5 (Jan13)	9,147	4,225	3,525	-3,102	423	-99	324	5 (2/3)	148 / 171
6 (Feb13)	8,460	3,788	3,128	-2,443	685	-170	515	11 (2/9)	148 / 356
7 (Mar13)	8,439	3,638	3,013	-2,382	631	-170	461	21 (7/14)	143 / 297
8 (Apr13)	7,456	3,351	2,729	-2,165	564	-162	402	11 (5/6)	145 / 246
9 (May13)	7,520	3,459	2,767	-2,308	459	-127	332	4 (0/4)	150 / 178
10 (Jun13)	8,383	3,622	2,927	-2,425	502	-156	346	11 (1/10)	149 / 186
11 (Jul13) [†]	7,693	3,233	2,932	-2,410	522	-192	330	11 (1/10)	149 / 170
Sum							4,117	110 (33/77)	1,617 / 2,390
Total									4,007

* *Notes:* TG and CG stand for treatment group and control group. Accounts that have been blocked after the awarding date are no longer included in the data (figures as of May 6, 2015). As is explained on the corresponding Wikipedia page, "blocks [...] are used by administrators to technically prevent a user account [...] from editing Wikipedia. Blocks are used chiefly to deal with immediate problems such as vandalism or edit warring" See: https://en.wikipedia.org/wiki/Wikipedia:Banning_policy (June 5, 2015).

[†] The numbers given in the columns "New accounts" to and including "Step 1: Automatic Filter" are based on a data dump received in June 2015. Since some user accounts have been blocked over time, these numbers are slightly lower than they were in July 2013, when the automatic filter was applied.

ONLINE APPENDIX B

TABLE B1 – RANDOMIZATION CHECK

Ordinal variable: Level of article editing activity before awarding date.

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

award	obs	rank sum	expected
0	2390	4825695	4789560
1	1617	3204333	3240468
combined	4007	8030028	8030028

unadjusted variance 1.291e+09

adjustment for ties -3.346e+08

adjusted variance 9.562e+08

Ho: $n\sim ea_ord(award==0) = n\sim ea_ord(award==1)$

z = 1.169

Prob > |z| = 0.2426

TABLE B2 — MULTIPLE TESTING ADJUSTMENTS

Outcome	DI	p-values	
		Unadj.	Multiplicity Adj.
active	0.0666	0.0003***	0.0003***
active (following 2 months)	0.0572	0.0003***	0.0003***
active, only article edits	0.0363	0.016*	0.0317*
active, only article edits (2 months)	0.0364	0.0197*	0.0197*
degree of activity, only article edits	0.0641	0.0167*	0.027*
active on talk pages	0.0664	0.0003***	0.0003***
active on Wikipedia meta pages	0.0204	0.0113*	0.0327*
user page self-edited	0.0310	0.0003***	0.0003***
user talk self-edited	0.0441	0.0003***	0.0003***
active, excl. award pages	0.0666	0.0003***	0.0003***
active, excl. award & own pages	0.0537	0.001**	0.0027**

Notes: The p-value adjustments in column 4 are based on the procedure and code developed by List et al. (2016). DI refers to "difference in means". If not indicated otherwise outcomes refer to the first month after the initial intervention. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

TABLE B3 – EFFECT ON LEVEL OF ACTIVITY

1st month after awarding date, article edits only.

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

award	obs	rank sum	expected
0	2390	4715172.5	4789560
1	1617	3314855.5	3240468
combined	4007	8030028	8030028

unadjusted variance 1.291e+09

adjustment for ties -3.837e+08

adjusted variance 9.071e+08

Ho: $n\sim ta_ord(award==0) = n\sim ta_ord(award==1)$

z = -2.470

Prob > |z| = 0.0135

TABLE B4 — ROBUSTNESS CHECKS

	Treatment (1)	Control (2)	Difference (3)
<i>A. General activity (1st month)</i>			
active, excl. award pages	0.42	0.35	0.07*** (0.000)
active, excl. award & own pages	0.40	0.35	0.05*** (0.001)
<i>B. Treatment effect persistence. DV: active, excl. award & own pages</i>			
Quarter 1	0.51	0.47	0.04* (0.013)
Quarter 2	0.34	0.30	0.03* (0.027)
Quarter 3	0.26	0.24	0.03* (0.048)
Quarter 4	0.26	0.23	0.03* (0.032)
Quarter 5	0.21	0.20	0.02 (0.232)
N	1617	2390	4007

Notes: Average values rounded to 2 decimal places. DV stands for dependent variable. *p*-values from Chi-square tests are reported in parentheses. Table B2 above also presents adjustments for multiple testing related to Panel A, which tests multiple outcomes falling into the same time period as the outcomes of the main analysis. The significance of the tests remains unchanged.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.