\*All units are guaranteed to have at least 12 months pre- and post-treatment observations.

\*DV: monthly publication count

**Authorship Order**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
| VARIABLES | Full Sample | First Authors | Middle Authors | Last Authors |
|  |  |  |  |  |
| Post | 0.00430 | 0.0207\* | -0.00185 | 0.0137 |
|  | (0.00558) | (0.0121) | (0.00673) | (0.0150) |
| Constant | 0.295\*\*\* | 0.000658 | 0.373\*\*\* | 0.108 |
|  | (0.0669) | (0.0479) | (0.0715) | (0.121) |
|  |  |  |  |  |
| Observations | 386,136 | 58,224 | 264,144 | 68,568 |
| Number of Units | 16,089 | 2,426 | 11,006 | 2,857 |
| R-squared | 0.019 | 0.018 | 0.019 | 0.024 |

**Chi-squared test of coefficient equality (Post)**

First vs Middle

Chi-squared statistic: 2.6526

P-value: 0.1034

First vs Last

Chi-squared statistic: 0.1319

P-value: 0.7164

Middle vs Last

Chi-squared statistic: 0.8946

P-value: 0.3442

**Full sample with interaction term**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Monthly Publications |
|  |  |
| Post | 0.00278 |
|  | (0.00592) |
| Post × First Author | 0.0221\*\*\* |
|  | (0.00651) |
| Post × Last Author | -0.0102 |
|  | (0.00771) |
| Constant | 0.295\*\*\* |
|  | (0.0670) |
|  |  |
| Observations | 386,136 |
| Number of Units | 16,089 |
| R-squared | 0.019 |

**Number of Total Publications before Adoption**

Mean: 35.82

Std: 41.35

Median: 23

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| VARIABLES | Full Sample | Bottom 50% | Top 50% | Bottom Third | Middle Third | Top Third |
|  |  |  |  |  |  |  |
| Post | 0.00430 | 0.0162\*\*\* | -0.00420 | 0.0202\*\*\* | 0.00726 | -0.00563 |
|  | (0.00558) | (0.00454) | (0.0104) | (0.00467) | (0.00789) | (0.0142) |
| Constant | 0.295\*\*\* | 0.0898 | 0.279\*\* | 0.0978 | 0.110\*\* | 0.291\*\*\* |
|  | (0.0669) | (0.0636) | (0.110) | (0.0815) | (0.0516) | (0.0275) |
|  |  |  |  |  |  |  |
| Observations | 386,136 | 198,768 | 187,368 | 136,248 | 122,616 | 127,272 |
| Number of Units | 16,089 | 8,282 | 7,807 | 5,677 | 5,109 | 5,303 |
| R-squared | 0.019 | 0.014 | 0.030 | 0.016 | 0.015 | 0.037 |

**Chi-squared test of coefficient equality (Post)**

Bottom 50% vs Top 50%

Chi-squared statistic: 3.2318

P-value: 0.0722

Terciles 1 vs 2

Chi-squared statistic: 1.9919

P-value: 0.1581

Terciles 1 vs 3

Chi-squared statistic: 2.9859

P-value: 0.0840

Terciles 2 vs 3

Chi-squared statistic: 0.6296

P-value: 0.4275

**Decile Subsamples**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | 1st Decile | 2nd Decile | 3rd Decile | 4th Decile | 5th Decile |
|  |  |  |  |  |  |
| Post | 0.0132 | 0.0400\*\*\* | 0.0157 | 0.0280 | 0.0123 |
|  | (0.00984) | (0.0115) | (0.0135) | (0.0175) | (0.0169) |
| Constant | 0.405 | 0.219\*\*\* | 0.155\*\*\* | 0.0537 | -0.143\*\*\* |
|  | (0.291) | (0.0128) | (0.0441) | (0.163) | (0.0219) |
|  |  |  |  |  |  |
| Observations | 38,712 | 39,096 | 38,784 | 37,968 | 39,168 |
| Number of Units | 1,613 | 1,629 | 1,616 | 1,582 | 1,632 |
| R-squared | 0.015 | 0.015 | 0.015 | 0.018 | 0.022 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (6) | (7) | (8) | (9) | (10) |
| VARIABLES | 6th Decile | 7th Decile | 8th Decile | 9th Decile | 10th Decile |
|  |  |  |  |  |  |
| Post | -0.0119 | 0.00226 | -0.00592 | -0.0360\* | -0.00578 |
|  | (0.0188) | (0.0206) | (0.0220) | (0.0213) | (0.0203) |
| Constant | -0.341 | 0.405\*\*\* | 0.148\* | 0.619\*\*\* | 0.480\*\*\* |
|  | (0.264) | (0.0458) | (0.0863) | (0.0316) | (0.0236) |
|  |  |  |  |  |  |
| Observations | 38,592 | 38,112 | 38,496 | 38,736 | 38,472 |
| Number of Units | 1,608 | 1,588 | 1,604 | 1,614 | 1,603 |
| R-squared | 0.025 | 0.024 | 0.026 | 0.030 | 0.022 |

**Pairwise Chi-squared test of coefficient equality** A green and orange chart with green squares

Description automatically generated

**Full sample with interaction term**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Monthly Publications |
|  |  |
| Post | 0.00462 |
|  | (0.00556) |
| Post × Total Publications before Adoption | -0.000864\*\*\* |
|  | (0.000151) |
| Constant | 0.304\*\*\* |
|  | (0.0684) |
|  |  |
| Observations | 386,136 |
| Number of Units | 16,089 |
| R-squared | 0.020 |

Baseline: 0.05544 increase in yearly publications

1 standard deviation increase in number of total publications: 0.429 (7.4% of Mean or 0.037 SD) decrease in yearly publication

**Months Since First Publication at Adoption Time**

Mean: 243.15

Std: 139.20

Median: 236

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| VARIABLES | Full Sample | Bottom 50% | Top 50% | Bottom Third | Middle Third | Top Third |
|  |  |  |  |  |  |  |
| Post | 0.00430 | 0.0211\*\*\* | -0.0116 | 0.0194\*\*\* | 0.0104 | -0.0134 |
|  | (0.00558) | (0.00631) | (0.00922) | (0.00668) | (0.0100) | (0.0116) |
| Constant | 0.295\*\*\* | 0.189\*\* | 0.370\*\*\* | 0.217\*\* | -0.0490 | 0.408\*\*\* |
|  | (0.0669) | (0.0945) | (0.0682) | (0.0910) | (0.126) | (0.0687) |
|  |  |  |  |  |  |  |
| Observations | 386,136 | 193,728 | 192,408 | 128,976 | 128,568 | 128,592 |
| Number of Units | 16,089 | 8,072 | 8,017 | 5,374 | 5,357 | 5,358 |
| R-squared | 0.019 | 0.015 | 0.024 | 0.014 | 0.021 | 0.025 |

**Chi-squared test of coefficient equality (Post)**

Bottom 50% vs Top 50%

Chi-squared statistic: 8.5663

P-value: 0.0034

Terciles 1 vs 2

Chi-squared statistic: 0.5601

P-value: 0.4542

Terciles 1 vs 3

Chi-squared statistic: 6.0042

P-value: 0.0143

Terciles 2 vs 3

Chi-squared statistic: 2.4149

P-value: 0.1202

**Decile Subsamples**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | 1st Decile | 2nd Decile | 3rd Decile | 4th Decile | 5th Decile |
|  |  |  |  |  |  |
| Post | 0.0279\*\*\* | 0.0216\*\* | 0.00818 | 0.0132 | 0.00969 |
|  | (0.00640) | (0.00844) | (0.00989) | (0.0117) | (0.0131) |
| Constant | -0.0436\*\*\* | 0.203 | 0.0296 | 0.0946\*\*\* | 0.00445 |
|  | (0.0142) | (0.161) | (0.0819) | (0.0218) | (0.0548) |
|  |  |  |  |  |  |
| Observations | 39,912 | 42,096 | 37,560 | 40,680 | 38,520 |
| Number of Units | 1,663 | 1,754 | 1,565 | 1,695 | 1,605 |
| R-squared | 0.024 | 0.017 | 0.016 | 0.015 | 0.017 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (6) | (7) | (8) | (9) | (10) |
| VARIABLES | 6th Decile | 7th Decile | 8th Decile | 9th Decile | 10th Decile |
|  |  |  |  |  |  |
| Post | 0.0105 | 0.0130 | 0.0171 | -0.00503 | -0.0412 |
|  | (0.0150) | (0.0166) | (0.0205) | (0.0232) | (0.0343) |
| Constant | 0.287\*\*\* | 0.0704\*\*\* | -0.137\*\*\* | 0.208\*\*\* | 0.965\*\*\* |
|  | (0.0160) | (0.0226) | (0.0229) | (0.0330) | (0.0449) |
|  |  |  |  |  |  |
| Observations | 35,592 | 38,136 | 36,576 | 38,712 | 38,352 |
| Number of Units | 1,483 | 1,589 | 1,524 | 1,613 | 1,598 |
| R-squared | 0.016 | 0.021 | 0.028 | 0.033 | 0.059 |

**Pairwise Chi-squared test of coefficient equality**

A green and orange graph

Description automatically generated

**Full sample with interaction term**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | Monthly Publications |
|  |  |
| Post | 0.00431 |
|  | (0.00558) |
| Post × Months before Adoption | -9.09e-05\*\*\* |
|  | (1.87e-05) |
| Constant | 0.298\*\*\* |
|  | (0.0673) |
|  |  |
| Observations | 386,136 |
| Number of Units | 16,089 |
| R-squared | 0.019 |

Baseline: 0.05172 increase in yearly publications

1 standard deviation increase in months since first publication: 0.152 (2.6% of Mean or 0.013 SD) decrease in yearly publication

**Average Monthly Publications For 1 Year Pre-Adoption**

Mean: 0.478

Std: 0.60

Median: 0.25

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| VARIABLES | Full Sample | Bottom 50% | Top 50% | Bottom Third | Middle Third | Top Third |
|  |  |  |  |  |  |  |
| Post | 0.00430 | 0.0669\*\*\* | -0.0554\*\*\* | 0.0738\*\*\* | 0.0270\*\*\* | -0.103\*\*\* |
|  | (0.00558) | (0.00410) | (0.0103) | (0.00418) | (0.00804) | (0.0158) |
| Constant | 0.295\*\*\* | 0.0779 | 0.242\*\*\* | 0.0437 | -0.121 | 0.411\*\*\* |
|  | (0.0669) | (0.0624) | (0.0767) | (0.0625) | (0.107) | (0.0240) |
|  |  |  |  |  |  |  |
| Observations | 386,136 | 194,040 | 192,096 | 152,136 | 121,416 | 112,584 |
| Number of Units | 16,089 | 8,085 | 8,004 | 6,339 | 5,059 | 4,691 |
| R-squared | 0.019 | 0.021 | 0.032 | 0.027 | 0.018 | 0.044 |

**Chi-squared test of coefficient equality (Post)**

Bottom 50% vs Top 50%

Chi-squared statistic: 121.7029

P-value: 0.0000

Terciles 1 vs 2

Chi-squared statistic: 26.6732

P-value: 0.0000

Terciles 1 vs 3

Chi-squared statistic: 117.0228

P-value: 0.0000

Terciles 2 vs 3

Chi-squared statistic: 53.7734

P-value: 0.0000

**Full sample with interaction term**

|  |  |
| --- | --- |
|  | (1) |
| VARIABLES | count |
|  |  |
| Post | 0.00541 |
|  | (0.00550) |
| Post × Productivity before Adoption | -0.159\*\*\* |
|  | (0.0109) |
| Constant | 0.326\*\*\* |
|  | (0.0689) |
|  |  |
| Observations | 386,136 |
| Number of Units | 16,089 |
| R-squared | 0.023 |

Baseline: 0.06492 increase in yearly publications

1 standard deviation increase in productivity: 1.14 (19.5% of Mean or 0.099 SD) decrease in yearly publication

**Correlation Matrix**

