

Reporting Summary

Nature Research wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Research policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a Confirmed

- ☐ ☒ The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement
- ☐ ☒ A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
- ☐ ☒ The statistical test(s) used AND whether they are one- or two-sided
Only common tests should be described solely by name; describe more complex techniques in the Methods section.
- ☐ ☒ A description of all covariates tested
- ☐ ☒ A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
- ☐ ☒ A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
- ☐ ☒ For null hypothesis testing, the test statistic (e.g. F , t , r) with confidence intervals, effect sizes, degrees of freedom and P value noted
Give P values as exact values whenever suitable.
- ☒ ☐ For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
- ☒ ☐ For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
- ☐ ☒ Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated

Our web collection on [statistics for biologists](#) contains articles on many of the points above.

Software and code

Policy information about [availability of computer code](#)

Data collection The telemetry data was collected via Microsoft Workplace Analytics software.

Data analysis The statistical analysis was conducted using Python 3.7.4 and the following packages: pandas 0.25.1, numpy 1.16.5, statsmodels 0.10.1, linearmodels 4.17, and scipy 1.3.1.

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A list of figures that have associated raw data
- A description of any restrictions on data availability

An anonymized version of the data supporting this study will be retained indefinitely for scientific and academic purposes. The data are not publicly available due to employee privacy and other legal reasons. The data are available from the authors upon reasonable request and with permission from Microsoft Corporation.

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☐ Life sciences ☒ Behavioural & social sciences ☐ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see [nature.com/documents/nr-reporting-summary-flat.pdf](https://www.nature.com/documents/nr-reporting-summary-flat.pdf)

Behavioural & social sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	This study uses quantitative quasi-experimental data to measure the effects of remote work on information workers' collaboration and communication practices.
Research sample	Our data describes the behavior of all 61,182 Microsoft U.S. employees whose data is recorded by Workplace Analytics. Since we study all U.S. employees whose behavior is recorded by Workplace Analytics, our sample is by definition representative. For privacy reasons, we do not have access to demographic variables such as age and gender. However, 9,715 employees are managers and 51,467 are individual contributors. 53,317 are long-tenured employees and 7,865 are short-tenured employees. 29,510 are engineers and 31,672 are non-engineers.
Sampling strategy	61,182 U.S. Microsoft employees using Workplace Analytics software. Workplace analytics is widely adopted within Microsoft.
Data collection	Our study uses data collected by Microsoft's Workplace Analytics software, which passively collects data on employees' behavior on Microsoft Teams (video calls, audio calls, IMs) and their work email accounts. Workplace Analytics does not record the contents of employees' communication, only the associated metadata. This data available from Workplace Analytics are anonymized. The data are only analyzed in aggregate.
Timing	The data were collected from December 1st, 2019 to June 30th, 2020.
Data exclusions	For our analyses that use coarsened exact matching, employees for whom there are no matches (i.e., they are 'treatment' employees in a bucket with no 'control' employees or vice-versa) are excluded from our analysis. This results in 105 Microsoft employees being excluded from these analyses. Other than this specific analysis, there are no other exclusions.
Non-participation	No participants dropped out or declined participation.
Randomization	Participants were not allocated into experimental groups since our study was observational.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Involved in the study
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology and archaeology
☒	☐ Animals and other organisms
☒	☐ Human research participants
☒	☐ Clinical data
☒	☐ Dual use research of concern

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☒	☐ Flow cytometry
☒	☐ MRI-based neuroimaging