



Assessing global trials of reduced work time *with* no reduction in pay

Authored by independent academic researchers at Boston College, University College Dublin and Cambridge University



Visit www.4dayweek.com for further information and resources

© 2022 4 Day Week Global Foundation

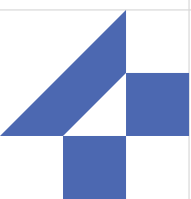
Suggested citation

Schor, Juliet B., Wen Fan, Orla Kelly, Guolin Gu, Tatiana Bezdenezhnykh, Niamh Bridson-Hubbard, 2022, "The Four Day Week: Assessing Global Trials of Reduced Work Time with No Reduction in Pay," Four Day Week Global, Auckland, NZ.

With contributions from: Jacob Chappellear, Sarah Ix and Meriel Zhao

Research team

This research was done through an international collaboration with researchers at Boston College, University College Dublin (UCD, Ireland) and Cambridge University (UK). The team consists of faculty, graduate students and undergraduates, all of whom made significant contributions to the research process, which involved development of the surveys, organizing the data collection, communicating with the companies and analyzing the data. Professor Kelly and her team at UCD took the lead on the Irish trial, which began in February 2022. Professors Schor and Fan, along with Ph.D. candidate Guolin Gu, at Boston College took the lead on the US trial. All faculty and graduate students took part in designing the surveys. Guolin Gu (Boston College) did the bulk of survey logistics, data analysis and communication with non-Irish companies. Tatiana Bezdenezhnykh (UCD) did the same for the Irish companies. Niamh Bridson Hubbard (Cambridge) took the lead on the midpoint survey time diary. Boston College undergraduates Jacob Chappellear, Sarah Ix, and Meriel Zhao worked on preparing this report. Professors Fan, Kelly and Schor directed the research at all stages and Fan and Schor wrote this report. The research team is grateful for the support and collaboration of Charlotte Lockhart, Andrew Barnes, Joe O'Connor, Hazel Gavigan, Alex Soojung-Kim Pang, and Charlotte Dixon.





Contents

Introduction	4
Why a four day week? Findings from previous studies	6
Organization of the trials and research design	7
What the companies did in their Trials	8
Describing the participants – Companies and Employees	9
Company results	14
Employee results	17
Work and employment	17
Health and well-being	23
Time use and care work	28
Environmental footprint and behaviors	32
Limitations of the research	34
Conclusion	35
Appendix	36
References	38
Message from our founders	39





Introduction

Twenty-twenty two has been the year of the Four Day Week. It was named by CNN to its prestigious “Risk Takers” as one of the nine most important new ideas in business. A number of national governments have announced sponsored trials of four day weeks. Interest from companies, employees, non-profits, and researchers has surged around the world. As people struggle to recover from the pandemic, workplace stress, long hours and the pressures of daily life have emerged as urgent problems.

A shorter work week is an obvious response. Work-time reduction has long been promoted as a multiple dividend reform—it has the potential to bring social, economic and climate benefits. Social benefits include less stress and burnout for employees, as well as more time for family, community, and self. Economic benefits depend on the form of work time reduction. Where it is accomplished without loss or even gains in productivity, it is beneficial for companies’ bottom lines. Where it is accompanied by increased hiring, it can reduce unemployment. It can also reduce costs in periods of tight labor markets or situations where employees are experiencing high levels of stress and burnout. Climate benefits include reduced energy expended in commuting, especially with four day work weeks; increases in low carbon but time intensive practices for households; and reduced carbon emissions as a consequence of trading income for time.

As the most popular form of work time reduction, a four day, 32-hour work week has been gaining momentum in recent years. Given this growth in interest, Four Day Week Global (4DWG) began supporting companies and non-profit organizations who wanted to try a four day, thirty-two hour work week with no reduction in pay. In 2022, their efforts led to the world’s first coordinated trials and the large-scale independent research effort of the impacts of a four day week.

The results are now in: the trials have been a resounding success on virtually every dimension. The companies are extremely pleased with their performance, productivity and overall experience. Almost all of the companies we’ve gotten data from have already committed or plan to continue with the four day week schedule. Their metrics show improvements. Revenue has risen over the course of the trial. Sick days and absenteeism are down. Companies are hiring. Resignations fell slightly, a striking finding during the “Great Resignation.”

Employees are similarly enthusiastic. Climate impacts, while less well-measured, are also encouraging. In this report, we present detailed findings, based on more than sixty outcome variables, and show that the results are overwhelmingly positive. They are also large, in terms of their magnitude.

Beginning in February of 2022, 4DWG began the first of a series of trials with companies who are instituting a reduced work week with no reduction in pay. The trials are six months in duration, plus an additional two month onramp during which the companies prepare for the scheduling change by attending workshops, getting coaching and mentoring, and being part of a peer support network. By the time they start a trial, the companies are well prepared to institute a major scheduling





change. While most of the companies instituted a four day, 32 hour schedule, with a common day off—typically Friday—some opted for different configurations. To join the trial they had to promise not to reduce pay, and to enact meaningful work time reduction.

In this report we present research results from the first two trials, which comprised 33 companies and 903 employees in the US, Ireland, and a few other countries. The first trial began at the beginning of February 2022; the second on April 1, 2022. The trials have been a tremendous success with both companies and their employees expressing enthusiasm, and data collection supports that conclusion. But before we dig into the details, here are a few pieces of information that convey the overall success of the trials.

From the company side, the experience has been a success. Of the 33 companies, 27 filled out a final survey in which we asked about their overall experience and whether they would be continuing with the four day week.

- On a scale of 0-10 from very negative to very positive, the companies' average rating for the trial is a 9.0.
- Asked about how their overall company performance was affected by the trial, the average score was 7.6.
- Asked specifically about productivity, the companies reported a score of 7.7.
- Among the 27, 18 are definitely continuing, 7 are planning to continue but haven't made a final decision yet, 1 is leaning toward continuing and 1 is not yet sure. None are leaning against or not planning on continuing.

From the employee side, the experience has been similarly successful.

- On a scale of 0-10, from very bad to very good, the average overall experience of the trial was 9.1.

- Ninety-seven percent of all the employees want to continue the trial.
- Asked to rate their current work performance compared to their lifetime best, the average score rose from 7.17 at baseline to 7.83 at the end of the trial.
- A wide range of well-being metrics showed significant improvement from the beginning to the end of the trial. Stress, burnout, fatigue, and work-family conflict all declined, while physical and mental health, positive affect, work-family and work-life balance, and satisfaction across multiple domains of life increased.
- Employees used their day off for hobbies, household work and personal grooming.

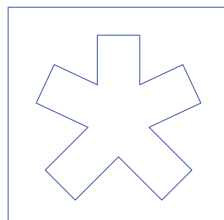
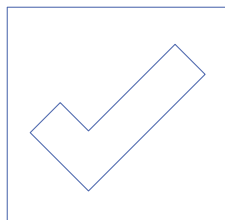
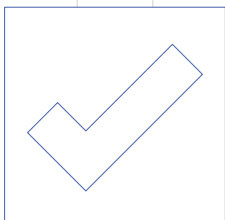
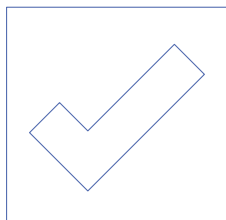
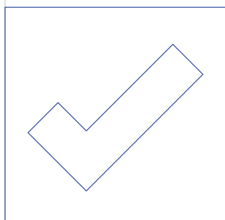
The pages which follow detail these findings. They have all been produced by the research team and this report is written by its members. The team is fully independent of 4DWG, and received no funding from the organization. All our research protocols have been approved by the relevant ethics boards at our universities. We begin with a brief overview of the existing literature on work time reduction. Next is a section on how the trials were run, and then descriptive information on the companies and employees in our sample—the industries represented, the size of the companies, and employee age, gender, racial category and the like. Then we go to outcomes, starting with findings from company metrics. From the employee surveys we divide the findings into the following sections: Work and Employment; Health and Well-being; Time Use and Care Work; and Environmental Footprint & Behavior. We conclude by discussing the broader implications of the findings for the future of work.





Why a four day week?

Findings from previous studies



Researchers have long been interested in how working hours affect well-being and economic performance. Work time reduction (WTR), and the four day week more specifically, is considered a triple-dividend reform, with social, economic and climate benefits.

There is abundant evidence that long working hours are bad for human health, with a recent WHO/ILO review finding associations with higher rates of heart disease and stroke.¹ Conversely, a growing body of evidence finds that work time reduction has positive health impacts on individuals, and is economically viable for employers even when not accompanied by reductions in pay. Over the last few decades, Nordic governments have conducted a series of successful WTR experiments. At Swedish social work agencies and other Swedish government offices, WTR yielded major impacts on exhaustion, stress, work-family conflict, and the quantity and quality of sleep.² Finnish experiments had similar findings.³ The largest trial of WTR before ours, with 2500 government employees, was carried out in Iceland from 2015-2019.⁴ Participants reported less stress and work-family conflict, more energy, and higher well-

being at work, in comparison to control sites, which did not show these improvements. This trial received considerable global attention in part because results also showed either stable or higher productivity alongside revenue neutrality. In Japan and Korea, reductions in the work week from 48 to 40 and 44 to 40 hours respectively, improved life satisfaction of affected workers and their spouses.⁵ Similarly, after the introduction of the 35-hour week in France, researchers identified significantly positive effects of shorter work weeks (without pay reductions) on workers' subjective health.⁶

There is also a growing body of literature showing associations between shorter hours of work and lower carbon emissions. Analyses based on comparisons across countries⁷ and across U.S. states⁸ find that hours and emissions are positively correlated. Household studies also show that working hours are positively related to household emissions.⁹ Similarly, studies of four day, compressed weeks (four, ten hour days) find that reduced commuting yields lower expenditures of energy.¹⁰





Organization of the trials and research design

In 2021, Four Day Week Global (hereafter 4DWG) began recruiting companies and non-profit organizations (hereafter referred to as “companies” or “organizations”) to participate in six-month trials.

The design of the trial involved two months of preparation, with workshops, coaching, mentoring and peer support, drawing on the expertise of those who had already implemented four day weeks in their own companies and individuals who had helped companies with these schedules.

Participation in these first two trials was free, although in later trials the organization has asked for a small donation to help defray the costs of running the trials. In addition to support, the trials offered research, conducted by independent academic researchers at Boston College, University College Dublin and Cambridge University.

The research consists of two parts: administrative data from companies, survey data from employees.¹ For both types of data, we employed a pre- and post-methodology. In the pre-trial phase, companies completed an “onboarding” survey with basic details about themselves, as well as providing six months of data to be used as a comparison with corresponding data collected during the six-month trial.

Once the trial began, companies provided monthly data on a small set of common metrics (revenue, absenteeism, resignations, new hires, and energy use) plus two optional individualized metrics of their choice. The absence of productivity or other performance metrics in the common set was because the organizations in the trial vary considerably in what they typically collect. We also asked for self-reported productivity from employees.

The employee surveys were done at three points—immediately before the trial began

(baseline), mid-way through the trial (mid-point) and at the close of the trial (endpoint). A timeline of the dates of survey administration is included in the Appendix.

The survey was administered through Qualtrix and the research team contacted employees directly via email using address lists supplied by the participating organizations. The separation of the survey from the employer is an important part of the research methodology: by assuring employees that their answers are confidential and will be unavailable to their employers, we are better able to collect honest and accurate information.

Only companies with enough employees to ensure the confidentiality of answers are receiving the survey data, and then, only in aggregated form.

The employee surveys at baseline and endpoint include questions covering work experience, well-being, family and personal life, and energy use.

The mid-point survey is much shorter and includes a small set of well-being questions, and a time-diary which asks respondents how they spent their most recent day off. Where available, we used existing, well-validated scales to measure well-being, work situation, and other outcomes. In other cases, we created our own questions. For the time diary we drew from the 25 harmonized activity codes laid out in the Multinational Time Use Study (MTUS) user guide. We adapted these activities slightly to suit our research needs, for example, splitting the “paid work” activity into “main paid work” and “other paid work” and adding an activity for “transit” between other activities.

¹ Kelly, O. M, Juliet B. Schor, Wen Fan, Tatiana Bezdenezhnykh, Guolin Gu, Niamh Bridson Hubbard, N. (2022) “The Four Day Week: Assessing global trials of reduced work time with no reduction in pay: Evidence from Ireland” University College Dublin, Press.





What the companies did in their Trials

To participate in one of the 4DGW trials, companies were not required to institute a particular type of working time reduction or four day week. They were able to join so long as they **maintained pay at 100% and gave employees a “meaningful” reduction in work time.**

However, in the first two trials they all did offer a four day week. Twenty-nine of the

thirty-three companies switched to a four day week for all employees. In four companies, a subset of employees stayed on a five-day schedule with reduced daily hours. Fifteen of the companies gave everyone Fridays off while eight of them did not have a common day off. A few companies chose other options, with Mondays or Wednesdays off or a different day off each week.

Table 1

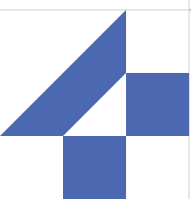
Forms of reduced working hours

Type of reduced working hours

Type of Work Option	Number of Companies	Percentage
Four Day Work Week	29	88%
Most staff on Four Day Work Week. A small group taking Reduced Daily Hours.	4	12%

Choice of day off

Day Off	Number of Companies	Percentage
Monday	1	3%
Wednesday	1	3%
Friday	15	47%
Monday or Friday	3	9%
Friday or spread across the week	2	6%
No same day off	8	25%
Change from week to week	2	6%





Describing the participants – Companies and Employees












Company Sample

All together, the 33 participating companies employed 903 people at baseline and 969 at the end of the trial.

A few characteristics of the group stand out. The largest group is from the administrative, IT, and telecoms sector, with twelve in that category. The second largest subset is professional services, with non-profits being the third group. Beyond that the companies are distributed over a range of industries, including health care, food, retail, construction and manufacturing.

Table 2

Participating companies by industry

Type of Industry	Number of Companies	Percentage 
Admin, IT & Telecoms	12	 36%
Professional services	9	 27%
Non-profit	3	 9%
Arts / Entertainment	2	 6%
Manufacturing	2	 6%
Construction	1	 3%
Educational services	1	 3%
Food	1	 3%
Healthcare or social assistance	1	 3%
Retail	1	 3%

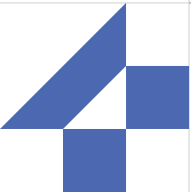




Table 3

Size distribution of companies by number of employees

Number of Employees	Number of Companies	Percentage 
1-10	17	 52%
11-25	9	 27%
26-50	4	 12%
51-100	1	 3%
101+	2	 6%

One characteristic which stands out among the group is the large number of small companies. While the size distribution is wide – with one 400+ company in the trial – 52% have ten or fewer employees. Nine percent have fifty or more. In addition, nine percent of the group are not-for-profit organizations.

The companies also span a wide geographic area (*see Appendix Table for details*). While the bulk are located in the US and Ireland, one large global company has employees in Australia, New Zealand, and the UK in addition to the US. There are also a few Canadian employees in the sample. There are also 12 companies in the sample (36%) who are fully remote, with no off-line headquarters.





Employee sample

At baseline, 762 out of the 903 employees who were sent the survey link filled it out, resulting in a response rate of 84% (see *Appendix table for details on response rates*). The response rate is somewhat lower at midpoint (71%) and endpoint (64%), which is typical in panel surveys.

Of those who completed the baseline survey, 72% (495 out of 688) participated in the endpoint survey as well, making it possible for us to track changes from before to after the trial. All findings below rely on the sample of 495 who completed both the baseline and endpoint survey.

We turn now to the socio-demographic characteristics of the employee sample. This is a largely balanced sample in terms of its gender composition, with 51% self-identifying as women, 48% as men, and 2% as the other category .

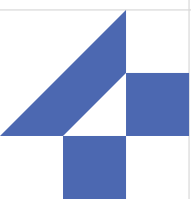
About two in five respondents lived in the US when surveyed, followed by Australia (21%), Ireland (18%), UK (12%), New Zealand (5%), and Canada (2%).

Most employees in the sample are whites (74%), 13% are Asians, 2% are Blacks, 1% are American Indians, and 9% identify as other racial categories. (Data on race is confidential in Ireland so it is not provided for the Irish companies).

This is a relatively young sample. Almost half of the respondents are below age 35; 30% are between 35 and 44, and about 20% are 45 or above.

Fully 72% of the sample have at least a bachelor's degree. Correspondingly, 14% of the sample are executives and managers and 63% are professionals, with the most commonly held occupations being Information and communications technology professionals (36%) and Business and administration professionals (11%).

Two out of three employees in our sample are either married or living with a cohabitation partner, and 29% have at least one minor child living at home.





Employee sample

Continues

Table 4

Demographic composition of the employee sample

Variable	Categories	Frequency	Percentage
Gender	Female	250	50.81%
	Male	234	47.56%
	Other	8	1.63%
Country of residence	US	198	40.91%
	Australia	102	21.07%
	Ireland	89	18.39%
	UK	56	11.57%
	NZ	26	5.37%
	Canada	8	1.65%
	Other	5	1.03%
Race (non-Irish sample)	White	294	74%
	Asian	53	13%
	Black or African American	8	2%
	American Indian and Alaska Native	3	1%
	Other	37	9%
Age	18–24	23	4.75%
	25–29	100	20.66%
	30–34	111	22.93%
	45–54	145	29.96%
	45–54	69	14.26%
	55–64	34	7.02%
	65 and over	2	0.41%





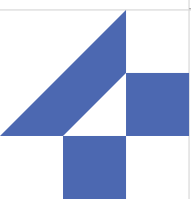
Employee sample

Continues

Table 4 (continued)

Demographic composition of the employee sample

Variable	Categories	Frequency	Percentage
Bachelor's degree	Yes	352	71.54%
	No	140	28.46%
Occupation	Chief executive, senior official, legislator	27	5.49%
	Manager	46	9.35%
	Science or engineering professional	27	5.49%
	Health professional	1	0.2%
	Teaching professional	11	2.24%
	Business and administration professional	56	11.38%
	Information and communications technology professional	178	36.18%
	Legal, social or cultural professional	38	7.72%
	Technician	7	1.42%
	Clerical support worker	7	1.42%
	Service or sales worker	25	5.08%
	Craft or related trades worker	18	3.66%
	Other	51	10.37%
In a relationship	Yes (including marriage and cohabitation)	328	66.66%
	No	164	33.34%
Is a parent	Yes	216	43.9%
	No	276	56.1%
Children at home	Yes (children under 18 years old)	143	29.1%
	No (children under 18 years old)	349	70.9%





Company results

For the companies, the trial has been a success. Of the 33 companies, 27 have filled out the final survey in which we asked about their overall experience and whether they would be continuing with the four day week.

On a scale of 0-10 where 0 is very negative and 10 is very positive, they rated the trial a 9. Asked about how their overall company performance was affected by the trial, the average score was 7.6. In response to a

question about how their company's productivity has been affected by the trial, the average score was 7.7.

Among the 27 companies who responded, 18 are definitely continuing with the four day week, 7 are planning to continue but haven't made a final decision yet, 1 is leaning toward continuing and 1 is not yet sure. None are leaning against or not planning on continuing.

Table 5

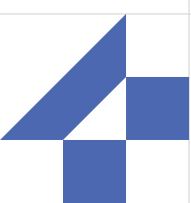
Company attitudes and experiences with the Trial

On a scale of 0 (very negative) to 10 (very positive)

Trial Impact	Measure	Mean
Overall	How do you think the 4 Day Week Trial has affected your company overall?	9.0
Productivity	How do you think the 4 Day Week Trial has affected company productivity?	7.7
Performance	How do you think the 4 Day Week Trial has affected company performance?	7.6

Plans for the trial going forward

Measure	Number of companies	Percentage
Definitely going to continue	18	67%
Planning on continuing but no final decision	7	26%
Leaning towards continuing	1	4%
Undecided	1	4%
Leaning against continuing	0	0%
Definitely not going to continue	0	0%





Company performance on common metrics

The foregoing are retrospective questions, asked at the end of the trial. We also collected data from the companies before they began, and all through the six months of the trial. Because the companies are so varied in their size, industry, and data collection practices, we confined the data collection to a small set of metrics that we thought every company would be able to provide. These were revenue, the number of employees in the company, resignations, new hires, and sick and personal days taken. We also asked about energy usage but because many companies did not have that data we have not included it. Because not all companies provided data on all the metrics, the number of companies included in our calculations varies a bit across the metrics.

We were also mindful that some of the data we were collecting may have seasonal variation, and we were conducting a six month trial. Therefore, before the trial started we asked for data from the same six months a year earlier—which was February-July 2021 for the first group and April-September for the second. In the table below, we call this the “comparison” period. For a number of the metrics we compare trial performance to the comparison period.

The first metric is revenue, perhaps the most global measure of performance. We compared revenue at the end of the trial to the beginning of the trial for the 16



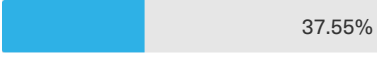
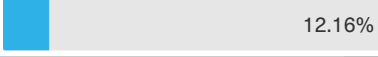
companies who supplied sufficient data across the six months. We weighted the data by company size, so that the very small (or big) companies wouldn't have too much (or too little) impact on the results. (*The unweighted data is available in the Appendix tables*).

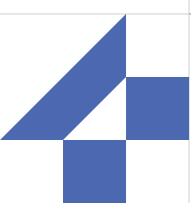
The first revenue measure is just the simple change in revenue from the beginning to the end of the trial. That rose 8.14%, weighted by company size. On average company revenues increased more than a percentage point a month during the trial. We then compared the change in revenue from the same six month period in 2021 to the trial period in 2022. We did this by calculating the average revenue during the comparison period, the average revenue during the trial period, and the percentage change between the two periods for each company. We then calculated a size-weighted average percentage change across the 20 companies that supplied sufficient data. Here we see a much larger increase, of 37.55%. These companies are successful, and growing, and continue to do so.

Growing revenue was accompanied by growth in the number of employees in the participating companies. On average, among the 18 companies that supplied data on this metric, there was a 12.16% increase in the number of employees from the start of the trial to the endpoint.

Table 6

Company metrics: Revenue and number of employees

Metric	Number of companies	Weighted change 
Revenue: Change from trial start to endpoint	16	 8.14%
Revenue: Change from comparison to trial period	20	 37.55%
Number employees: Change from trial start to endpoint	18	 12.16%





We also asked about a number of other trends that we expected might be affected by the four day week schedule. The first was resignations. The trial took place during what has been popularly known as the “Great Resignation,” a period of time when workers have been quitting their jobs at record rates. However, in the four day week companies, there was almost no change in the likelihood that an employee would quit between the comparison period and during the trial. Measured as the number of quits per 100 employees, we found a small decline from 1.76 to 1.70 from

2021 to the 2022 trial period. This suggests that the four day week reduced exit from these organizations. We also found a small uptick in new hiring, from 2.06 per hundred employees to 2.09. There was a change in absenteeism, measured as sick and personal days per employee per month. Those fell from .56 (or just over half a day) in the comparison period to just .39 during the trial. In part because of the small numbers in the sample, we are unable to say that these three trends are statistically significant.

Table 7

Company metrics: Resignations, new hires and absenteeism

Weighted average	Comparison period	Trial period	Number of companies
Resignation rate (per 100 employees)	1.76	1.70	22
New hire rate (per 100 employees)	2.06	2.09	17
Number of sick and personal days (per employee per month)	0.56	0.39	18





Employee results

Work and employment

In the previous section, we reported on how participating organizations experienced the trial. We turn now to the data we collected from employees. When we report that something “changed” that means the difference between the baseline and endpoint values is a statistically significant change (rather than a random, or meaningless change). Asterisks in the table refer to the level of confidence we have in the meaningfulness of the change. Small changes that are not statistically significant mean that we cannot rule out that the before and after values are the same.

Our findings show that the trial changed the workplace in important ways. As expected, worktime declined, from 40.83 hours per week to 34.83. While this isn't a full reduction to 32 hours, that's due to a number of factors—a few companies planned something less than an 8 hour reduction in hours. In 4 companies, working hours were well above 40 when the trial

began, and the new scheduled work time was greater than 32. In others, people were still doing some work on the day off. Nevertheless, there was a significant average reduction, of a full 6 hours of work. When measured by the number of people whose work time went down (or up), we find that 83% of the sample experienced a decline in working hours, while 9% were working more.

Similarly, the average number of days worked went from 5.00 to 4.36. The frequency of overtime also fell, both on average and in terms of individual experiences. It's also notable that the prevalence of remote working also declined a bit over the trial, from an average of 3.72 days per week to 3.37. The fact that employees were coming back to work during the trial makes the findings even more impressive.

Table 8

Employee work and employment outcomes

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Work time	Number of working hours per week	40.83	34.83	-6.00	***	-83.37%	+8.53%
Days of work	Number of working days per week	5.00	4.36	-0.64	***	-64.15%	+2.10%
Working remotely	Never to fully (0-2)	1.31	1.36	0.04	*	-7.13%	+11.11%
Remote work days	Number of days working remotely	3.72	3.37	-0.35	***	-45.78%	+17.39%
Overtime	How often do you work overtime? Never to daily (1-4)	2.20	1.97	-0.22	***	-34.88%	+18.18%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests.





Table 9

Employee reports of work time reduction at Trial end

Variable	Measure	Mean or Percentage
Trial participation	Percentage actually reduced work time	90%
WTR arrangement	Percentage with one day off per week	91%
WTR frequency	0-3 (never to every week) reduced work time	2.7
WTR duration	Number of months taking reduced work time	5.6

When we consider the quality and experiences of work during the trial a few things stand out. First, we asked employees how their current work ability compared to their lifetime best. Before the trial began, average self-rated ability was 7.17 on a scale from 0-10. At the end of the trial, it had risen significantly, to 7.83. People felt that they were more productive and doing a better job at work with the shift to a four day

week. Second, employees also were able to exercise an increased level of control over their schedules. We assessed schedule control using a multi-item scale which includes control over days worked, number of hours, time off work and when each workday begins and ends. Before the trial began, the average value was 3.63, which increased modestly, to 3.81.

Table 10

Employee workplace experiences: What changed

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Current work ability	Compared with lifetime best (0-10)	7.17	7.83	0.66	***	-21.06%	+51.70%
Schedule control	Very little to very much (1-5), 4 items	3.63	3.81	0.18	***	-32.91%	+49.26%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

On the other hand, many things did not change, which is a welcome finding. (Lack of change is indicated in the table by the absence of indications of statistical significance.) Perhaps most importantly, the four day week did not lead to an increase in the intensity, or pace of work, on average, as measured from baseline to endpoint.

The sample was split roughly evenly into three groups on this measure. While just over a third of employees did register an increase, nearly as many had a decline, and the remainder had no change in their work intensity. In conjunction with reports from the company, this suggests that the process of work re-organization, and





reductions in unproductive time, was mostly successful. This means that productivity and performance were not achieved via speedup, which is not generally a sustainable, or desirable strategy.

We also found that the complexity of people's work didn't rise on average, which is another kind of intensification. Just over 42% did have some increase in complexity, but 41% had a decrease and the remainder

had no change. Another reassuring finding is that employees did not experience an increase in job insecurity nor were they more likely to be intending to leave their jobs.

Somewhat surprisingly, self-reported absenteeism did not decline. And a very welcome finding is that people did not use their day off to take on a second job—there was no increase in this measure.

Table 11

Employee workplace experiences: What didn't change

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Work intensity	2 items: working at very high speeds, working to tight deadlines, never to all the time (1-5)	3.40	3.44	0.04		-35.32%	+37.23%
Work complexity	6 items: quality standards, learning new things, autonomy, never to all the time (1-5)	3.76	3.74	-0.02		-41.06%	+42.55%
Turnover intentions	"I am seriously considering quitting or changing my current job", strongly disagree to strongly agree (1-5)	1.98	1.94	-0.04		-27.99%	+22.22%
Job security	Likelihood of being laid off: very to not at all (1-4)	3.53	3.53	0.00		-15.60%	+16.03%
Work absenteeism	Absences from work due to sick or health-related leave in past 4 weeks, number of days (0-10+)	0.61	0.57	-0.04		-18.40%	+16.67%
Second job	Percentage with a second job	24.6%	24.4%	-0.2%		-6.64%	+6.42%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests





The research design of using pre and post trial measurements is the most accurate way to determine how things changed, however we also added a few retrospective questions in the endpoint survey, in which we asked people to look back to the beginning of the trial and tell us how they thought things had changed.

One difference from the before-and-after findings discussed above stands out: there was a reported increase in the pace of work. Just over half of employees thought their pace of work increased, just over 40% thought it was the same (*a small group—4%—felt it decreased*).

The original question (reported above) is a 2 item scale that references working at very high speeds and to tight deadlines. So wording may account for the different results. It's also possible that the pace of work was a bit higher, but people had already adjusted, and it no longer felt more intense so that the level from baseline to endpoint did not rise. Similarly, respondents retrospectively registered a statistically significant, although slight increase in the workload, although about three-quarters reported no change.

Findings on the second job question aligned with the answers we got between baseline and endpoint.

Table 12

Retrospective questions on how employees experienced the Trial

Q. As a result of the trial, did the following change for you?

Variable	Measure	Mean	Sig [^]	← Decrease	Increase →
Work pace	Decrease (-1), no change (0), increase (1)	0.5	***	-4.39%	+52.63%
Work load	Decrease (-1), no change (0), increase (1)	0.1	***	-5.90%	+16.81%
Second job	Decrease (-1), no change (0), increase (1)	0.0		-4.30%	+7.81%

[^]Significance is only for the six change variables by one-sample t test, ***p<0.001





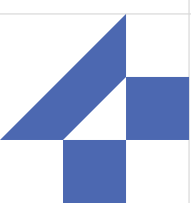
Another set of retrospective questions asked people about their overall experience of the trial. On a 0-10 scale where 0 was very bad and 10 was very good, the average score was 9.1, a very high level of satisfaction.

Table 13

Employee reports of work time reduction at Trial end

Variable	Scale	Mean
How would you rate your experience with the trial?	On a scale of 0 (very good) to 10 (very bad)	9.1

Variable	Categories	Count	Percentage
Want to continue trial	Yes/Definitely want to continue	444	96.94%
	Somewhat want to continue	4	0.87%
	No preference	1	0.22%
	Somewhat do not want to continue	2	0.44%
	No/Definitely do not want to continue	0	0%
	Other	7	1.53%
	Total		458






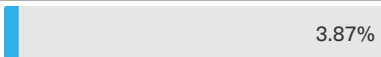
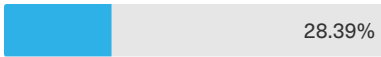

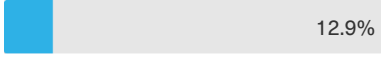
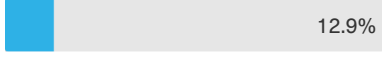
Finally, we were curious about the monetary value of the four day week. For the group who began in April we asked those who preferred four days (94% of the sample) how much money they'd require at their next job to go back to a five day schedule. Thirty-two percent (the first two categories) reported they'd take a five day job with a pay increase of 0-25%. Forty-two percent would require a 26-50% increase. Thirteen percent said they'd only go back to

5 days if their pay were more than 50% higher. And another 13% said that no amount of money would induce them to accept a five day schedule.

When asked if they wanted to continue, 96.9% said yes, they definitely wanted to continue. Only two respondents leaned toward not continuing, and not a single person said they did not want to continue.

Table 14

How Much Do Employees Value a Four Day Week?

Salary increase required in next job	Count	Weighted change 
Less than 10% pay	6	 3.87%
10-25%	44	 28.39%
26-50%	65	 41.94%
50%+	20	 12.9%
No amount of money	20	 12.9%

The open-ended comments tell a similar story. One employee wrote: "It's been a wonderful initiative. I'm 59yo and have worked full time my whole life and worked hard. For years I have dreamt about one day being able to reduce my working week, but due to financial commitments I've been unable to. Working full time remains the case very much for the foreseeable future but at least it is 4 days a week!" Another says they are: "Absolutely loving the 4-day work week. It took time to adjust, but months later, I am more productive and more satisfied with my job while working

significantly less than I was prior to the trial." Even among some who weren't able to get down to an average of 32 hours were positive: "The trial has been fantastic, allowing me to take the extra day or time when I can. Due to the nature of this role it isn't always possible, however even having the chance or possibility to do so has made a big difference in my lifestyle." And, while most respondents didn't talk about pay, one did make it clear that they recognized the economic implications: "The 4 day work week is equivalent to ~25% pay bump in my opinion."





Health and well-being

In view of the strong positive changes in employees' work situations, it is not surprising that health and well-being outcomes also show noticeable improvements six months into the trial. Some well-being outcomes are specifically related to work. We found that work stress decreased over the trial period. On a 1-5 scale from never to all the time, reported work stress declined from 3.15 before to 2.95 after the trial. While nearly 17% of employees did experience an increase in stress, twice as many were less stressed, with the remainder recording no change in

stress levels. Burnout also declined—this is a 7-item scale capturing experiences of tiredness, exhaustion, frustration, and leisure time regarding work. Over the course of the trial, burnout fell significantly—from 2.74 to 2.30. Two out of three (67%) employees reported lower levels of burnout, compared to only 20% who registered a higher burnout score. Corresponding to the decreases in work stress and burnout, employees are more satisfied with their job, registering a significant increase from 7.34 to 7.62 on a 0 to 10 scale.

Table 15

Employee experiences:

Reduced stress and burnout, increased job satisfaction

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Work stress	Frequency of work stress over the past four weeks, never to all the time (1-5)	3.15	2.95	-0.21	***	-32.42%	+16.74%
Burnout	7 items: exhaustion, frustration, "burnt out" from work never to always (1-5) over the past four weeks	2.74	2.30	-0.44	***	-67.58%	+20.55%
Job satisfaction	Not satisfied at all to completely satisfied (0-10)	7.34	7.62	0.28	**	-27.55%	+45.55%

[^]p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

Generic well-being outcomes also improved by the end of the trial. The average score of mental health (ranging from 1 to 5 with 5 being excellent), for example, increased from 3.03 at the beginning of the trial to 3.33 by the end.

Anxiety and negative affect also both fell substantially, and positive affect increased from 3.15 to 3.64. It is also encouraging to see that participants reported improvements in their physical health.

When asked to rank their physical health from 1-5 (poor to excellent) before the trial began, the average response was 3.17. The average response at the end of the trial jumped to 3.35, an improvement of 0.18.

This strongly suggests that a four day work week has the potential to reduce costs associated with health care.





Table 16

Employee experiences: Improved emotional, mental, and physical well-being

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Physical health	Self-rated, poor to excellent in US, and very bad to very good in Irish (1-5)	3.17	3.35	0.18	***	-21.24%	+33.69%
Mental health	Self-rated, poor to excellent in US, and very bad to very good in Irish (1-5)	3.03	3.33	0.30	***	-18.88%	+38.20%
Anxiety	Never to daily (1-4)	2.39	2.18	-0.21	***	-36.21%	+18.32%
Positive emotions (affect)	5 items: feeling cheerful, vigorous, interested, scale of 1-5	3.15	3.64	0.49	***	-21.43%	+66.88%
Negative emotions (affect)	3 items: downhearted, lonely, tense, 1-5	2.30	2.01	-0.29	***	-51.30%	+25.54%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

One reason for these improvements in physical and mental health may be the changes in exercise, fatigue and sleep that employees experienced.

Comparing exercise frequency and duration pre- and post-trial, we found significant, health-enhancing changes in both. There was a small increase in the frequency of weekly exercise, from 2.53 to 2.72 times per week. Larger increases were found in how long people exercised, both per session (an almost 6 minute increase—from 44.81 to 50.54 minutes) and per week (23.7 minutes more—147.9 to 171.6 minutes).

We also found improvements in fatigue, with the average fatigue score falling from 2.63 to 2.26 (on a scale of 1-4, never to daily).





Table 17

Employee experiences: More exercise and better sleep

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Exercise frequency	Times per week, taking the mean of five categories, 0, (1-2)1.5, (3-4)3.5, (5-6)5.5, (7+)7	2.53	2.72	0.19	*	-23.18%	+32.40%
Exercise duration each time	Minutes spent exercising in a typical session	44.81	50.54	5.73	***	-23.10%	+40.35%
Exercise duration per week	Minutes spent exercising in a week	147.9	171.6	23.7	**	-33.92%	+46.49%
Fatigue	Overall fatigue, never to daily (1-4)	2.63	2.26	-0.38	***	-41.42%	+13.09%
Sleep problems	Insomnia or sleep difficulties, never to daily (1-4)	2.35	2.03	-0.33	***	-37.42%	+15.91%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

The prevalence of insomnia and general sleep problems also declined significantly, from 2.35 to 2.03 (again, from 1-4, never to daily). Because of an inadvertent change in the answer categories for sleep time, responses on this metric are not fully reliable. If we assume that responses are evenly distributed in the 6-7 hours of sleep category, we do find that the fraction of respondents who are “sleep deprived” (defined by fewer than 7 hours per night) fell significantly, from 41.3% to 35.1%.

However, these results should be interpreted with caution due to possible seasonal variations in sleep.





Table 18

Employee experiences: Improved work/family life balance

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Work-family balance	Ability to combine paid work with care responsibilities: very difficult to very easy (1-5)	2.90	3.62	0.72	***	-9.88%	+58.95%
Work-life balance	Ability to combine paid work with social life: very difficult to very easy (1-5)	2.98	3.76	0.78	***	-10.00%	+60.72%
Work-to-family conflict	Too tired from work to do household jobs: never to several times a week (0-3)	1.99	1.44	-0.55	***	-50.45%	+11.94%
Family-to-work conflict	Difficulty concentrating on work due to family responsibilities: never to several times a week (0-3)	1.49	1.18	-0.31	***	-40.15%	+14.71%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

Positive changes also occurred at the interface of work and family/life. When asked how easy it is to combine paid work with care responsibilities, the average score increased from 2.90 to 3.62 on a 1-5 scale with 5 being very easy. Similarly, work-life balance increased from 2.98 to 3.76. Also notable is that both work-to-family and family-to-work conflict declined following the trial. For example, when employees were asked whether they come home from work too tired to do some of the household jobs which need to be done, the average score fell from 1.99 to 1.44.





Table 19

Employee experiences: Increased satisfaction

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Life satisfaction	Not satisfied at all to completely satisfied (0-10)	6.64	7.53	0.89	***	-16.92%	+57.48%
Satisfaction with household finances	Not satisfied at all to completely satisfied (0-10)	6.58	6.79	0.21	*	-30.15%	+41.65%
Satisfaction with relationships	Not satisfied at all to completely satisfied (0-10)	7.03	7.56	0.52	***	-25.60%	+44.90%
Satisfaction with time	Not satisfied at all to completely satisfied (0-10) with the amount of time you have to do the things you like doing	5.39	7.38	1.99	***	-13.02%	+73.75%

[^]p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

We also asked a set of questions to assess employees' overall life satisfaction and satisfaction with specific life domains.

At the beginning of the trial, when asked how satisfied they are with their life, participants responded with an average of 6.64 out of 10. This measure had an almost full point increase, to 7.53.

Employees are also more satisfied with other domains of life, including household finances, relationships, and time.

Most notably, employees recorded an almost two point increase in satisfaction with time, from 5.39 before the trial to 7.38 after.





Time use and care work

How has the four day week trial affected employees' time use patterns? In the baseline and endpoint surveys we asked respondents to record the number of hours they spend in each of the following activities per week: (a) caring for or educating (grand)children, (b) caring for elderly or disabled or infirm family members, neighbors or others, (c) housework, (d) cooking, (e) volunteering, and (f) own hobbies.

We do not find the amount of time spent on caring, housework, or cooking changed during the trial, but employees now spend 0.15 more hours on volunteering and 0.41 more hours on hobbies. This is likely an underestimate given that the categories provided in the survey are not detailed enough (e.g., 3–5 hours per week) to capture small changes.

Table 20

How has the Four Day Week affected employees' time use patterns?

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Time caring for/educating grand/children	Average hours per week in 7 categories, from 0 to 20+ hours	4.36	4.37	0.01		-27.78%	+22.73%
Time caring for elderly disabled infirm	Average hours per week in 7 categories, from 0 to 20+ hours	1.90	1.99	0.09		-16.55%	+23.45%
Time doing housework	Average hours per week in 7 categories, from 0 to 20+ hours	3.26	3.26	0.00		-28.17%	+30.35%
Time cooking	Average hours per week in 7 categories, from 0 to 20+ hours	3.30	3.26	-0.04		-28.79%	+25.71%
Time volunteering	Average hours per week in 7 categories, from 0 to 20+ hours	1.54	1.68	0.15	*	-11.33%	+22.66%
Time on own hobbies	Average hours per week in 7	3.36	3.77	0.41	***	-22.20%	+46.15%

[^]p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

Alongside the time use questions, we also asked employees to assess whether, for each of the activities listed above, they spend as much time as they would like to, or if they wish they could spend either “less time” or “more time” in that activity. By the end of the trial, workers are less likely to say they want to spend more time in virtually every activity except for elderly care.

For example, the percentage of workers who want to spend more time on childcare is almost halved from as high as 45% at baseline to 25% six months later. These findings indicate that the four day week arrangement has enabled workers to allocate their time in a way that satisfies their preferences.





Table 21

Changes in perceived time inadequacy

Variable	Measure	Baseline	Endpoint	Change	Sig [^]
Caring for/educating (grand)children	Percentage "would like to spend more time"	45.1%	25.0%	-20.1%	***
Caring for elderly disabled infirm	Percentage "would like to spend more time"	27.7%	21.5%	-6.2%	
Doing housework	Percentage "would like to spend more time"	21.9%	13.3%	-8.6%	***
Cooking	Percentage "would like to spend more time"	31.2%	18.6%	-12.6%	***
Volunteering	Percentage "would like to spend more time"	63.2%	56.9%	-6.3%	*
Own hobbies	Percentage "would like to spend more time"	83.6%	60.0%	-23.6%	***

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

One important question for assessing the four day week is whether workers use their off-day to take on extra paid work (either at a second job or on their main job). If people take on extra outside work, it is likely to undermine many of the benefits of a four day week.

If they end up at their main job, it means the new schedule isn't being implemented.

As noted above, there was no recorded increase in second-job holding, and our time diary data also indicate that people are actually taking the day to do things other than work.

In the midpoint survey, we asked employees to record each of the activities they engaged in, along with the duration, during their most recent day off.

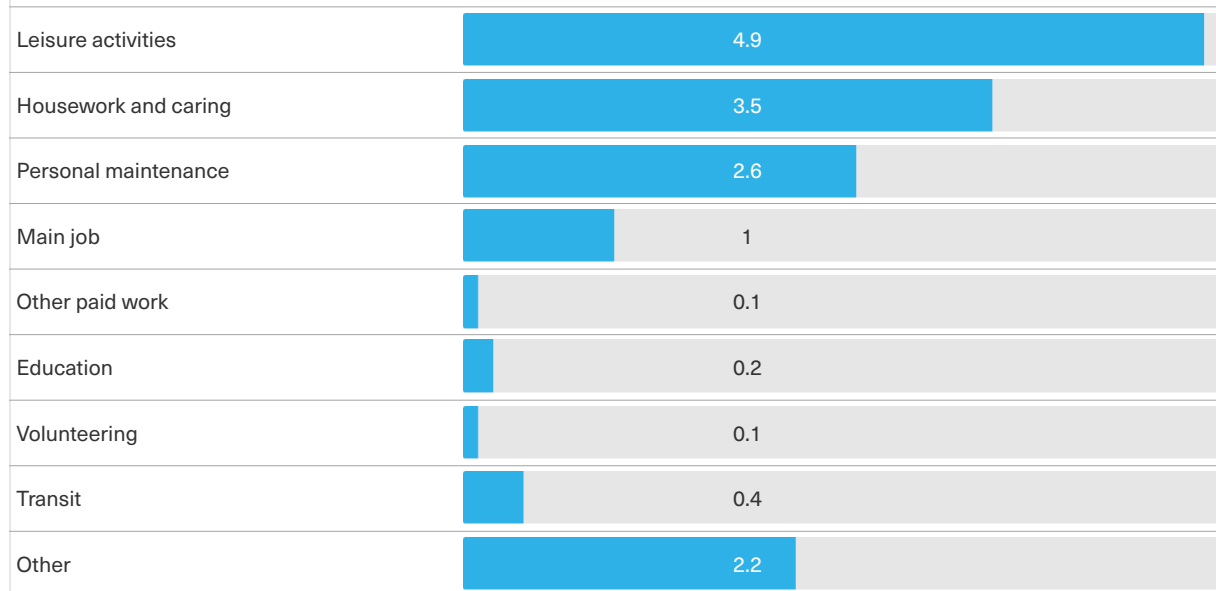




Figure 1

Time use on the off-day

Hours spent on additional day-off (7am–10pm)

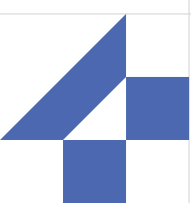


Data source: Midpoint employee survey conducted May and July, n=586

As shown, employees allocated most of their time to leisure (4.9 hours per day), followed by housework and care work (3.5 hours) and personal maintenance (2.6 hours).

Only about one hour was spent on their main job, and consistent with the result we show above, only 0.1 hours was spent on other paid job(s).

Overall, the trial does appear to have provided a large amount of time for employees' self care, housework and leisure.





Proponents of four day weeks have also hoped that this schedule will promote gender equality in the household division of labor. The rationale is that with more free time available, men may spend greater time in housework or childcare, thereby narrowing the well-documented gender gap in unpaid domestic and care work. We did not find this effect.

Among respondents who have a partner, the move to four day week did not change the household division of labor, measured by respondents' share of time looking after children or housework. We find this to be the case for the whole sample as well as by gender, though there is marginal evidence that men appear to have increased their contribution to childcare slightly from before to following the trial.

Table 22

Changes in couples' division of labor, by gender

Variable	Measure	Baseline	Endpoint	Change	Sig [^]	← Decrease	Increase →
Share of time looking after children: female	More time than partner (1), less time (-1), same amount (0)	0.44	0.31	-0.13		-25.45%	+12.73%
Share of time looking after children: male	More time than partner (1), less time (-1), same amount (0)	-0.54	-0.40	0.14	+	-9.64%	+21.69%
Share of housework: female	More than fair share (1), less than (1), just about (0)	0.30	0.32	0.02		-15.08%	+14.53%
Share of housework: male	More than fair share (1), less than (1), just about (0)	-0.03	0.03	0.05		-19.57%	+23.37%

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

Meanwhile, we find evidence that childcare costs went down since the beginning of the four day week trial. When asked how the money they spent on childcare changed following the trial, the average response is -0.2 (-1 indicates decrease and 1 indicates increase).

Table 23

Change in childcare costs

Variable	Measure	Mean	Sig [^]
Change in childcare costs	Decrease (-1), no change (0), increase (1)	-0.2	***

[^]***p<0.001 using a single sample t test to see if the change equals zero.





Environmental footprint and behaviors

The third category of expected benefit, after economic and social, is environmental, and specifically climate benefit.

As noted above, prior research has found associations between shorter hours of work and lower carbon emissions. Studies of the compressed work week (four, ten hour days) have found lower energy use—via less commuting and less organizational energy use.

In the 4DWG trials, we were interested in measuring carbon footprints, for both employees and households. However, carbon footprints consist of many types of energy use, both direct and indirect, and are difficult to measure. Most of the existing calculators for individuals are not oriented to short-term changes. A new generation of personal calculators relies on credit card data, which was not available to us for privacy reasons.

We decided to focus on a few key areas which comprise the biggest sources of energy expenditure—household electricity, heating and cooling, gas purchased for driving, and domestic and international travel. It is important to include both company and household changes, however, a good number of the companies were unable to give us data either because their energy bills are included in rental payments or they are fully remote. And there are two additional factors that complicate our measurement of carbon footprints. First, energy prices had a large increase over the period of the trials (February to October 2022). And second, there can be strong seasonality in household energy use and travel. We are still developing national correction factors for those metrics, and will report them at a later date. At this point we have a limited number of metrics to share.

One important carbon variable is commuting. Here we see significant decreases in the frequency and duration of commuting. Between the beginning and end of the trial the fraction of respondents who reported commuting to work by car fell, from 56.5% to 52.5%. A second commuting variable—amount of time spent commuting—fell nearly an hour a week, from 3.56 to 2.59 hours. This is notable, given that remote work also fell over the trial period.

We also asked about travel. We found no change in domestic travel over the trial. International travel rose slightly, but from a very low base—the average number of trips in the previous month went from .09 (i.e. just under a tenth of a trip) to .22 (just over a fifth of a trip). We expected an increase for seasonal reasons, so this seems to be a good climate result. Rather than use their three-day weekends to take cheap flights to other countries, or even to travel domestically, the participants in this trial seem to have been spending their off-days in hobbies, housework and self-care. When we apply a seasonal correction, we may see a significant decline in travel. In the end-of-trial retrospective questions, we also asked respondents whether they thought their energy use decreased, was unchanged, or increased over the trial period, and found a .1 point increase. Respondents also thought their leisure travel had gone up.

Finally, we asked a few questions about pro-environmental behavior. For the first, which included household recycling, walking and cycling rather than driving, and buying eco-friendly products, we found a small but significant increase in self-reports of these behaviors. The other two questions, which were about volunteering for environmental causes and sharing environmental information and educating others, did not change. Overall, the carbon related metrics that we have to date are mostly encouraging, but incomplete.





Table 24

Commuting and travel behavior

Variable	Measure	Baseline	Endpoint	Change	Sig [^]
Commute time per week	Number of hours spent per week commuting	3.56	2.59	-0.96	***
Means of commuting to work	Percentage commuting to work by car	56.5%	52.5%	-4.0%	**
Domestic travel	Number of domestic trips taken in the past 4 weeks	1.96	1.93	-0.02	
International travel	Number of round-trip international flights taken in the past 4 weeks	0.09	0.22	0.13	***

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests

Table 25

Retrospective questions on energy and travel

Variable	Measure	Mean	Sig [^]
Change in energy use	Decrease (-1), no change (0), increase (1)	0.1	***
Change in leisure travel	Decrease (-1), no change (0), increase (1)	0.6	***

[^]***p<0.001 using single sample t tests to see if the change equals zero

Table 26

Pro-environmental behaviors

Variable	Measure	Baseline	Endpoint	Change	Sig [^]
Pro-environment behavior: household	4 items: recycling, buying eco friendly, walking+cycling over driving, never to always (1-5)	3.48	3.64	0.15	***
Pro-environment behavior: volunteering	"I volunteered to help care for the environment", never to always (1-5)	1.67	1.71	0.05	
Pro-environment behavior: social	2 items: encouraging others and educating oneself about environmental protection, never to always (1-5)	3.06	3.08	0.03	

[^]+p<0.1, *p<0.05, **<0.01, ***p<0.001 using paired-sample t tests





Limitations of the research

While we have been able to collect a large number of outcome variables from employees, and a smaller number from companies, our data collection and analysis has been limited in a number of ways. The findings from these first two trials are almost all quantitative, although we do have a small number of interviews from the Irish trial. We collected open-ended comments from the employee survey, but they are not sufficiently comprehensive to offer a full picture.

A second limitation is from the company data. Because there are a large number of companies in the trial, many of whom do not collect detailed performance or productivity data, we had to confine our company data gathering to a small number of metrics.

In future trials, we hope to expand those efforts. In subsequent trials we have expanded data collection to include in-depth interviews. Reports from the trials which began in June (UK) and August (Australasia) 2022 will incorporate interview data and we hope to include an interview component in all subsequent trials.

Finally, we have not yet had the opportunity to finish our detailed corrections on the energy use data, but hope to complete those shortly. In addition, in forthcoming trials, we hope to collect more robust energy use measures.





Conclusion

Proponents of the four day week argue that it provides multiple benefits—to the organizations that implement this innovative schedule, to the employees who work it, and to the climate.

To assess these claims, we collaborated with 4 Day Week Global and studied companies and employees who were piloting a four day work week with no reduction in pay. As we have detailed throughout this report, the results of these trials have been overwhelmingly positive.

The companies report that they are extremely pleased with their performance, productivity and their overall experience.

Employees express similar sentiments. These are valuable pieces of information.

However, our research design allows us to go beyond recording the sentiments of those involved to quantify how the trial changed well-being and employee experiences, both at work and home.

The before-and-after design is a far more accurate way of assessing impacts than retrospective data.

We found that the trial had profound effects. For the companies, relevant metrics showed high levels of success. Revenue rose approximately 8% over the trial, and was up 37.55% in comparison to the same period in 2021. Hiring rose, absenteeism was reduced and resignations declined slightly.

And on a wide range of outcomes, employees were far better off at the end of the trial than they were at the beginning. They were less stressed and less burned out. The ratings they gave on their physical and mental health were better. They were spending more time exercising and were less fatigued. Their sense of satisfaction with their lives improved, both generally and across a range of domains. Their self-reports of work performance went up substantially, but not because they were sped up or worked harder. The companies' efforts to re-organize work were successful in eliciting productivity without speed-up.

Perhaps the bottom line for success is what we found in terms of how much more employees valued their current job at the end of the trial.

Seventy percent of respondents in the sample told us that at their next job they would require between 10 to 50% more pay to go back to a 5 day schedule. Thirteen percent said they'd require more than 50%. And 13% said that no amount of money could convince them to give up the four day week.

These calculations should serve as a strong signal to employers that it's time to retire the nearly hundred year old convention of the five day, forty hour week and begin to embrace a four day, thirty-two hour week.





Appendix

Table A.1

Unweighted company metrics: Revenue and number of employees

Metric	Unweighted	N
Revenue: % change from start of trial to endpoint	30.15%	16
Revenue: % change from comparison to trial period	31.22%	20
No. employees: % change from start of trial to endpoint	13.90%	18

Table A.2

Unweighted company metrics: Resignations, new hires and Absenteeism

Unweighted average for	Comparison period	Trial period	N
Resignation rate (per 100 employees)	1.99	2.39	22
New hire rate (per 100 employees)	2.42	2.02	17
No of sick and personal days (per employee per month)	1.03	0.76	18

Table A.3

Timeline for survey distribution

	Baseline sent out	Baseline closed	Midpoint sent out	Midpoint closed	Endpoint sent out	Endpoint closed
February	1/27/2022	2/11/2022	5/5/2022	5/30/2022	8/2/2022	9/13/2022
April	3/22/2022	4/1/2022	7/13/2022	8/1/2022	9/27/2022	10/17/2022

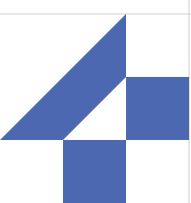




Table A.4

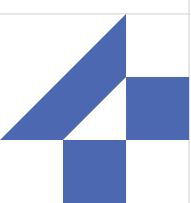
Response rates for employee surveys (February and April combined)

Metric	Emails sent	Responses	Response rate
Baseline	903	762	84%
Midpoint	987	702	71%
Endpoint	969	617	64%
Overall response rate	792	495	63%
Retention rate from baseline to endpoint	688	495	72%

Table A.5

Geographic location of companies

Location	Number of companies	Percentage
Fully remote	12	36%
Ireland	11	33%
US	6	18%
UK	2	6%
Australia	1	3%
New Zealand	1	3%





References

1. Pega, Frank, Bálint Náfrádi, Natalie C. Momen, Yuka Ujita, Kai N. Streicher, Annette M. Prüss-Üstün, Alexis Descatha, et al. 2021. "Global, Regional, and National Burdens of Ischemic Heart Disease and Stroke Attributable to Exposure to Long Working Hours for 194 Countries, 2000–2016: A Systematic Analysis from the WHO/ILO Joint Estimates of the Work-Related Burden of Disease and Injury." *Environment International* 154 (September): 106595. <https://doi.org/10.1016/j.envint.2021.106595>.
2. Barck-Holst, Peter, Åsa Nilsson, Torbjörn Åkerstedt, and Carina Hellgren. 2017. "Reduced Working Hours and Stress in the Swedish Social Services: A Longitudinal Study." *International Social Work* 60(4):897–913. doi: 10.1177/0020872815580045.
3. Anttila, Timo, and Jouko Nätti. 1999. "Experiments of Reduced Working Hours in Finnish Municipalities." *Journal of Human Resource Costing & Accounting* 4 (2): 45–61. <https://doi.org/10.1108/eb029057>.
4. Haraldsson, Guðmundur D, and Jack Kellam. 2021. "Going Public; Iceland's Journey to a Shorter Working Week." *Alda and Autonomy*. https://autonomy.work/wp-content/uploads/2021/06/ICELAND_4DW.pdf.
5. Hamermesh, Daniel S., Daiji Kawaguchi, and Jungmin Lee. 2017. "Does Labor Legislation Benefit Workers? Well-Being after an Hours Reduction." *Journal of the Japanese and International Economies*, Discussion Paper Series, 44 (June): 1–12. <https://doi.org/10.1016/j.jjie.2017.02.003>.
6. Berniell, Inés, and Jan Bietenbeck. 2020. "The Effect of Working Hours on Health." *Economics & Human Biology* 39. 100901.
7. Knight, Kyle W., Eugene A. Rosa, and Juliet B. Schor. 2013. "Could Working Less Reduce Pressures on the Environment? A Cross-National Panel Analysis of OECD Countries, 1970–2007." *Global Environmental Change* 23(4):691–700.
8. Fitzgerald, Jared, Juliet Schor, and Andrew Jorgenson. 2018. "Working Hours and Carbon Dioxide Emissions in the United States, 2007-2013." *Social Forces* 96(4):1851–74.
9. Fremstad, Anders, Mark Paul, and Anthony Underwood. 2019. "Work Hours and CO2 Emissions: Evidence from U.S. Households." *Review of Political Economy* 31(1):42–59.
10. Utah Department of Human Resource Management. 2010. *A Performance Audit Of the Working 4 Utah Initiative. Performance Audit*. 2010–10. Office of the Legislative Auditor General.



Message from our founders

4 Day Week Global is a not-for-profit organisation which runs pilot programs, works with governments to form policy and conducts research, such as this report.

Our team are delighted to bring this, our first report, to you. The collaboration with Dr. Juliet Schor and her team at Boston College and around the world has been exciting and fulfilling. This is just the start, and we look forward to more research through 2023 which will expand this data set and study other areas of reduced work time and its influence on business, people and our society.

The information we have gleaned from this first pilot program helps companies to improve their workplace, helps us understand how to support businesses better and gives valuable data for other organizations to follow. We are encouraged to see our assumptions have been proven correct, for the main part, and we look forward to building on this information over time.

We would like to thank our researchers Juliet Schor and Wen Fan from Boston College and Orla Kelly at University College Dublin. Also, we want to thank our team, Alex Soojung-Kim Pang, Hazel Gavigan, Charlotte Dixon, Nasr Bitar, Jack Lockhart and Gabriela Brasil. They have worked tirelessly and with admirable dedication, what we present today reflects that. We would also like to thank our former CEO, Joe O'Connor, who set up this team and led the organisation to this point. None of this would have been possible without these people.



Charlotte Lockhart and Andrew Barnes

Co-founders – 4 Day Week Global



