Challenges and Gratitude: A Diary Study of Software Engineers Working From Home During Covid-19 Pandemic

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Abstract:

The Covid-19 pandemic dramatically changed how organizations worked. Microsoft was one of the first to ask employees to work from home (WFH). We developed an anonymous nightly diary study with 435 participants, and we learned about their experiences over the first 10 weeks of the WFH directive. We found the largest challenges were having too many meetings, feeling overworked, and physical and mental health. However, there were things to be grateful for, and many people were thankful for family, increased flexibility, their job, and their team. We also learned that the simple act of reflecting nightly during the study could be helpful: people who reported no gratitude were 22% (p-value=.000007) less likely to report being satisfied that day. Our management used the anonymized, aggregate data to create new programs (such as No Meeting Friday) to address these challenges. We then saw immediate feedback on these programs in the diaries and used that to inform future decisions.

Keywords:

Work from home; developer wellbeing; developer satisfaction; covid-19

Introduction

The Covid-19 global health pandemic changed the way many companies work, especially technology companies. Microsoft announced on Wednesday March 18th that all workers in their Puget Sound, WA offices should begin working from home (WFH) the following day, and not return to the office until directed. This diary study began the following week and collected daily accounts of the WFH period from 435 employees in a major software department of Microsoft.

This diary study specifically focused on understanding the daily challenges and items of gratitude for individuals WFH, and their impact on work satisfaction. Diary studies have been used in the past to study software developers work habits and goal setting (Meyer A. , Murphy, Zimmermann, & Fritz, 2019) , (Czerwinski, Horvitz, & Wilhite, 2004) and (Lazar, Feng, & Hochheiser, 2017). Since Covid-19 emerged as a global crisis, there has also been work to understand the impact of this pandemic on developer

productivity (Bao, et al., 2020); on home/work interactions (Larson, Shah, Sherman, & Singer-Velush, 2020) and how it affects software developers in general (Ralph, et al., 2020).

While there is much existing research on WFH, there is less so on the dramatic shift that just occurred due to Covid-19, and the impact it will have on wellbeing and satisfaction of software engineers. This research seeks to answer the following research questions:

RQ1: What are the main challenges facing software engineers who are working from home during the Covid-19 pandemic?

RQ2: What are points of gratitude for employees of a software engineering org during the WFH covid-19 pandemic?

RQ3: Does regular reflection on gratitude impact the satisfaction of employees during crisis?

RQ4: Does regular reflection on gratitude impact the wellbeing of employees during crisis?

To answer these questions, we asked an organization of 2,000 engineers Microsoft to voluntarily enroll in a nightly diary study. Of those, 435 registered to participate. Over the course of 10 weeks, these diaries have resulted in a rich data set of verbatim and rated information, with 4,641 diaries submitted in total. We used this data set to find common challenges and points of gratitude during this period. All data was stored anonymously and shared in aggregate form. We presented the general trends in gratitude and hardships to the leadership in the organization so that they could use our insights to create new working from home guidelines promptly, such as No Meeting Friday; starting 30 minute meetings 5 minutes late and 60 minute meetings 10 minutes late; and creating more time for sharing difficult feelings experienced during the pandemic.

Participants in the study stated that this diary study made them feel that the company and organization cared about them during this time, and that it helped them achieve some work-life balance by signaling the end of the work day. 68% of respondents said they liked the daily reflections, and 62% would like to continue.

This paper contributes (1) a set of challenges engineers in major tech companies may face when radically switching from working in the office to working from home, (2) strategies for addressing these challenges and (3) ways to increase engineer's satisfaction and wellbeing through enhancing gratitude opportunities.

Prior Work

Much prior work exists in the field of software engineering from home; using journals or reflections to study developer experience, wellbeing, and satisfaction; and the impact of gratitude on wellbeing. We will briefly discuss these topics.

The massive shift to remote work occurred very recently due to the Covid-19 pandemic, but early work has been released. Bao *et al* studied how working from home effected productivity in developers working at Baidu during the Covid-19 pandemic. (Bao, et al., 2020). This early work found WFH has

different impacts on developers for different measurements (also found in internal research at Microsoft). Prior to this shift, much work was done around the productivity of working from home, including Baker *et al* work on perceived productivity (Baker, Avery, & Crawford, 2007); Coenen *et al* work on workplace flexibility and its impact on product development (Coenen & Kok, 2014); Campbell's work on virtual work programs and employee productivity (Campbell, 2015); and more recently, Kazekami's work on improving productivity by using telework (Kazekami, 2020)

Self-reflection has been studied in the past, including by Meyer *et al* who looked at how self-monitoring could impact software development (Meyer A. N., Murphy, Zimmerman, & Fritz, 2017). M. Czerwinski *et al* have used diary studies in the past to study task switching and interruptions (Czerwinski, Horvitz, & Wilhite, 2004), and Kersten-van Dijk *et al* completed a review of literature on self-insight and behavior change finding that there is reason to be optimistic that self-insight can impact behavior. Diary studies have also been used to look at task completion (Claessens, Eerde, Rutte, & Roe, 2010). Other similar work by Willams *et. al* looked at detaching and reattaching to the work place by self reflection, and the impact this can have on stress and productivity (Alex C. Williams, 2018).

Lastly, gratitude has been linked to wellbeing in various studies (Emmons & Mishra, 2011), (McCollough & Emmons, 2003), (Fredrickson, Emmons, & McCullough, 2004). After the 2001 terrorist attack, researchers studied the impact of positive emotions in crisis (Fredrickson, Tugade, Waugh, & Larkin, 2003). They found positive emotions (such as gratitude) in the wake of the attacks was closely related to resilience, depressive symptoms and postcrisis growth. Gratitude in the workplace has also been studied, including effect of positive mood on prosocial behaviors at work (George, 1991); impact of gratitude on burnout (Lanham, Rye, Rimsky, & Weill, 2012); and its impact on well-being and job satisfaction (AL-Hashimi & Al-Barri, 2017).

Methods

To address the research questions, an *in-situ* study was conducted with volunteered employees from a software engineering team, asking for nightly reflections on their experience each day. When participants registered for the study, they created a username that would be used to track their daily entries while providing anonymity. Each evening, they filled out their reflective diary using their selected username. At the end of 10 weeks, participants filled out another survey on their experience over the course of the study, with questions around how gratitude reflection impacted their wellbeing, their overall satisfaction with work during this time, and whether they would recommend doing this reflection to their colleagues.

Reflective Diary

Each day at 4:30pm PST, all 435 participants were emailed a link to a reflective diary. This journal consisted of 4 short, required questions and an optional free text section, and these were present every day. Each week, a different optional question would be added. This was to keep the survey fresh but also to gather data that we wanted for a moment in time, rather than every day.

1.	Username: *		
	Enter your answer		
2.	How satisfied are you with your WFH today? *		
	89999		
3. What was the hardest part of your WFH day? *			
	Enter your answer		
4. What are you grateful for in your WFH day? *			
	Enter your answer		
5.	Feel free to keep track of anything else that happened during your WFH day. You can use this as a work journal.		
	Enter your answer		
		4 mins	

Figure 1 Nightly reflection diary sent each day at 4:30pm PST

6. Optional Bonus Question! Rate the quality of collaboration on documents in your work group (e.g. Timely feedback, valuable contributions/ideas, multiple contributors, etc...) (1 being very low quality; 5 being very high)



Figure 2 Example of optional bonus question. These would change each week.

The questions were designed to get insight on what was challenging so leadership could address it, but also to encourage self-observation and gratitude reflection to promote wellbeing and positivity (Johnson & White, 1971), (Travers, Morisano, & Locke, 2014), (Lai & O'Carroll, 2017), (Emmons & Mishra, 2011), The optional questions were used to gather time-sensitive information. For example, when we saw many employees saying the hardest part of the workday was too many meetings, we implemented a No Meeting Friday rule. The optional question the following week was about how No Meeting Friday impacted the engineers so we could understand if this helped address their challenge or not. These were optional as the initial study registration did not mention these questions.

Study setup

Before the study, we sent an email to all employees (~2,000 engineers) in the organization. This email explained the goal of study and directed them to a registration form which included privacy information and consent. We also gathered optional demographic information, such as if they previously worked from home, what code base they worked in and what discipline they were (project management,

developer, people manager, etc). They enlisted in the study and began receiving nightly reminders to fill out a diary. After 2 weeks, we noticed some people were leaving the challenge or gratitude question blank. We were unable to tell if this was because they had no challenge or gratitude that day, or they simply did not want to or forgot to fill out that part of the journal. To address this, these questions were required starting in week 3 and the form could not be submitted without them filled. This gave us a more accurate count of who really had no challenge or no gratitude but could have also forced people to write something when they normally wouldn't have (see Limitations for more discussion on this).

A follow-up survey was sent out to learn more about how the overall study impacted the participants. Participants were asked to select what level of impact the study had on various things (such as their wellbeing or satisfaction with work); answer open questions on how they found it to be impactful; and answer ranking questions on their overall satisfaction with the WFH period thus far.

Participants

The table below shows the demographics of our respondents.

Demographic	Options	Number
Location		
	California	22
	China	6
	Dublin	13
	India	46
	Israel	8
	New England	12
	Puget Sound	316
	Other	12
Gender		
	Man	276
	Non-binary	5
	Prefer not to say	10
	Woman	144
Role		
	Administrator	10
	Designer	24
	Engineering Manager	26
	PM	75
	Software Engineer	273
	Other	27

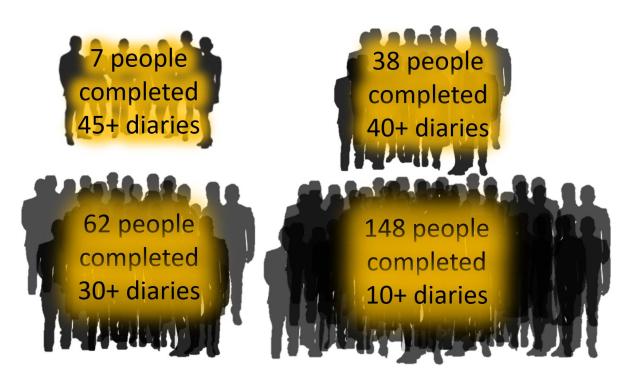


Figure 3 Number of people who completed different numbers of diaries

Data Analysis

We collected 4,641 nightly reflection diaries. We then performed a Thematic Analysis (Braun & Clarke, 2006) to qualitatively analyze the data, find themes, commonalities, and key concepts. We used open coding to code the responses to two questions — "What was the hardest part of your WFH day?" and "What are you grateful for in your WFH day?". Responses that did not fit into one of our 18 codes were grouped into "other". We often went back over the codes while coding the next week, iterating and changing as needed to best fit the meaning coming through in the verbatims. Dr. Butler coded most of the findings, and Dr. Story looked at a random sample of 200 responses to validate coding, with only 2 questioned on choice of codes.

Findings

RQ1: What are the main challenges facing software engineers who are WFH during the Covid-19 pandemic?

Respondents would report challenges in open text. We converted open text to 0 or more codes and the below graph shows the number of challenges codes reported each week.

Daily Reflections each Week by Number of Challenges

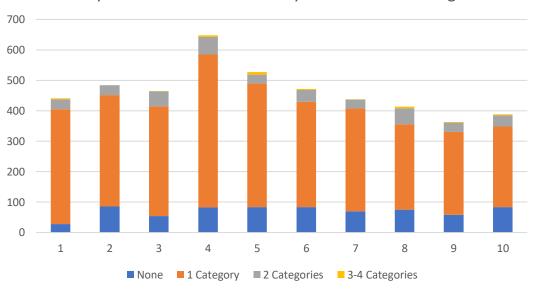


Figure 4 Number of responses each week. Some respondents would write "none", others would list one work, or sentences that were coded into multiple categories

Challenges as Percentage of All Challenges Reported (2-Week Buckets)

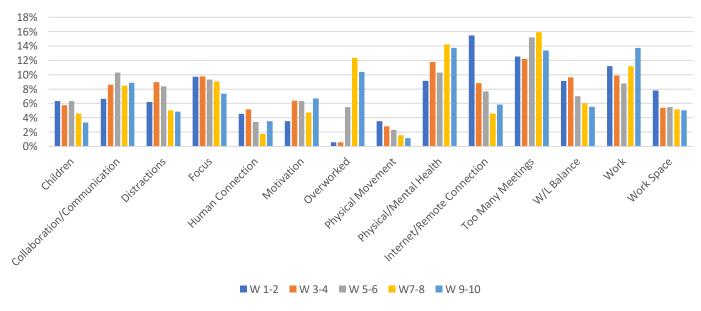


Figure 5 Challenges reported over time, in two week groups.

Certain trends appeared for reported challenges. We see "physical and mental health" issues are trending upwards (these include worries about Covid-19; headaches; over tired; sore back from lack of ergo furniture; etc). "Too many meetings" has been reported week over week, consistently taking up over 10% of the responses. As time has gone on, more people have reported that the hardest part of their day was something related to their job itself – a bug, a difficult conversation, a build break, etc – and therefore something we expect to be a challenge (the "Work" code). Initially, "Internet connection" and "Remote Connection" were problems, but those were quickly resolved as the organization realized the move to WFH would be long term and created solutions for these issues.

At the end of the study, we asked people if the challenges they faced early on improved overtime, and 61% said they had. However, 41% of people said the challenges did not improve, but they did not want to keep reporting them each day (see Limitations for further discussion).

We also looked at how the various challenges correlated with whether people were satisfied with their workday — whether they selected "Satisfied" or "Very Satisfied" for their answer to "How satisfied are you with your WFH day today?" in the nightly diary. Looking day-to-day, people were particularly less likely report being satisfied on days that they mentioned challenges related to "Overworked" (-13%, p-value=.002), "Motivation" (-21%, p-value=.0001), or "Focus" (-14%, p-value=.003). On days when people reported no challenges, they were 24% (p-value=6.6e-11) more likely to report being satisfied. Since some people may not to want report the same challenges day-after-day, we also look at whether someone ever reported a given challenge: ever reporting "Motivation" (-25%, p-value=.0007), "Mental health" (-15%, p-value=.046), and "Overworked" (-15%, p-value=.047) were most strongly associated with someone reporting being satisfied on less than 60% of their responses.

Women were particularly likely to at some point report challenges related to "Motivation" (17%, p-value=.003), and "Focus" (15%, p-value=.014). Employees in the US were less likely to report no challenges on a given day, but there was no large difference for any specific category of challenge. Program managers tended to report more challenges than software engineers in general, and they were particularly more likely to at some point report challenges around "Overworked" (14%, p-value= .014), "Physical movements" (18%, p-value= .0008), and "Meetings" (18%, p-value= .007). In the other direction, software engineers were more likely than program managers to report challenges related to "Work space" (19%, p-value=.005) and (unsurprisingly) "Remote connection" (36%, p-value= 6.1e-8). Managers were much less likely than individual contributors to at some point report challenges related to motivation (-35%, p-value=.021) and "Collaboration" (-31%, p-value=.029) and were much more likely to ever report challenges related to "Meetings" (35%, p-value= .027), "Kids" (35%, p-value=.022), and "Mental health" (36%, p-value=.018).

Below are a sample of real verbatims from across the study addressing some of the top challenges.

Overworked

"My to-do list just keeps getting longer; no meeting days fill with meetings; I worry I'll drop something important." Program Manager

"I'm so burned out. All my energy is put to work and then I just am wiped." – User Researcher

Physical & Mental Health

"The realization that there isn't really much to look forward to..." Software Engineer

"Stress, headache. I just tried to push through" – Program Manager

Too Many Meetings

"I seem to write the same everyday; people need to respect meeting time. When we were not WFH, setting up a meeting usually meant the meeting organizer had to also find a conference room. That act then meant meetings were of a reasonable length and finished on time (because someone else had the room). Now, with no meeting room restriction, it seems some people have no thought to time management and respecting others and just put 2 hour meetings on schedules (or longer)" – Program Manager Team Manager

Motivation

"Very hard to find motivation to do boring tasks, still. At least being trapped in an office forced me to get through them" – Software Engineer

"Starting to feel fenced in by the continuous cycle of work/home without any break in the routine to refresh things; takes away some level of energy to complete tasks" – Software Engineer

RQ2: What are points of gratitude for employees of a software engineering org during the WFH covid-19 pandemic?

Like challenges, respondents would report gratitudes in open text. The below graph shows how many were reported each week.

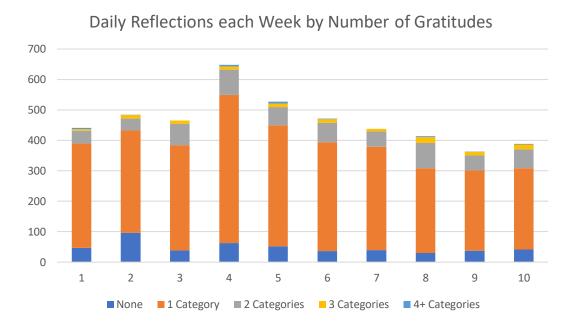


Figure 6 Number of codes provided in gratitude text question each week

Gratitude as a Percentage of Total Gratitudes Reported (2-Week Buckets)

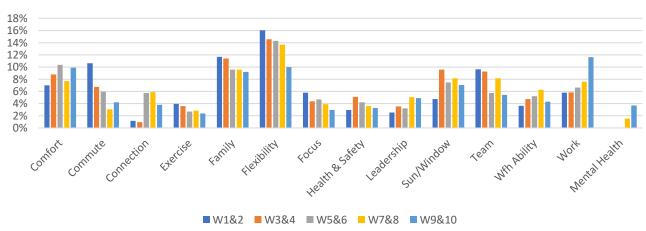


Figure 7 Gratitude responses in two week buckets

Early in the study, people were thankful to no longer have a commute ("Commute"); for "Flexibility" with WFH; and with having more time with their "Family". As time went by, people reported these less, and new items of gratitude appeared. In the last 4 weeks of the study a new code was created called "Mental Health". This code represents people being grateful for things such as their mental health; meditation; that they are feeling good; that they have a counsellor to speak with; etc. People also reported being more thankful for their actual "Work" (as in, the job they do, being thankful they made progress on a bug, being grateful they finished a report, etc), most often calling out achieving a milestone or completing a goal. Respondents were also consistently happy for the ability to WFH and for the health & safety WFH provided.

Women tended to report more distinct gratitudes; they were particularly likely to at some point report gratitude related to the "Comfort" of WFH (13%, p-value=.037) or their "Team" (22%, p-value=.0004). Employees in the US also tended to report more distinct gratitudes but were 3% (p-value=.015) less likely to report being grateful for the "Flexibility" of WFH. Relative to program managers, software engineers tended to report fewer gratitudes (both each day and ever mentioning them) in general, but they were particularly less likely to at some point mention gratitude for "Sun/window" (-13%, p-value=.038); however software engineers were more likely than program managers to at some point mention gratitude for Flexibility (15%, p-value=.032). Relative to individual contributors, managers were much more likely to at some point report gratitude related to "Exercise" (34% p-value=.012), but much less likely to report gratitude related to "Focus" (-35%, p-value=.025).

Below are verbatims for some of the gratitude categories:

Flexibility

"I was able to walk the dog while I had a build going, and I was able to do some chores while listening in on a all-hands meeting." – Software Engineer

"The flexibility that Microsoft has provided to let us structure our days the way we need to in order to balance family & work" – Program Manager

Family

"More time with my daughters and wife" - Program Manager

"Spending more time with family. Able to still work despite being at home." – Software Engineer

Mental Health

"Mindfulness Week and the resources for mental health. I listened to a keynote, participated in a mindfulness activity, and it helped me feel more calm and in control of my negative emotions." – Designer

"being here, being heard, having meaningful work to do" – Software Engineer

RQ3: Does regular reflection on gratitude impact the satisfaction of employees during crisis?

During our end of study survey we asked participants if reporting gratitude had an impact on their overall satisfaction. 49% of respondents said it **positively** impacted their satisfaction during this period, with only 6% saying it negatively impacted their satisfaction.

We also looked at how the gratitudes people listed in their daily journals correlated with reporting being satisfied with their workday. Looking day-to-day, people were particularly more likely to report being satisfied on days that they mentioned gratitudes related to "Focus" (15%, p-value=.012) or "Work" itself (13%, p-value=.0008). On days when people reported no gratitudes they were 22% (p-value=.000007) less likely to report being satisfied. Looking at whether someone ever reported a given gratitude – in case people were avoiding repeating themselves – respondents were 15% (p-value=.04) more likely to report being satisfied in at least 60% of responses if they ever mentioned a gratitude related to "Connection" (meaning having moments of connection, good conversation, etc, with other humans, whether digitally or in the real world).

RQ4: Does regular reflection on gratitude impact the wellbeing of employees during crisis?

47% of respondents in the final survey said the daily gratitude reflection positively impacted their wellbeing, and 48% said it had no impact. Interestingly, 35% also said it helped increase their feelings of control during uncertain times (with 7% saying it decreased these feelings).

Impact of study on control, well being and satisfaction

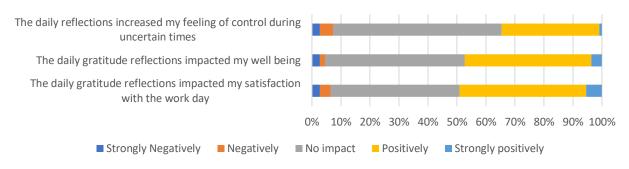


Figure 8 Impact of diary study on feelings of control, well-being and satisfaction

Discussion

Gratitude Impact

When the study was created, our first thought was to gather information on how the change to WFH was impacting our engineers. However, we also wanted the gratitude section in an effort to get people to do daily gratitude, as we knew from existing research (Fredrickson, Tugade, Waugh, & Larkin, 2003) (Lanham, Rye, Rimsky, & Weill, 2012) that this act alone can help people during challenging times.

Only 26% of respondents regularly reflected on what they were grateful for before the study. However, we saw that 45% and 48% said it positively impacted their satisfaction with their workday, and their wellbeing, respectively. This suggests that something as simple as asking employees what is working for them can improve their satisfaction and wellbeing.

In addition, 68% of people said they liked the daily reflections, and 62% said they would like to continue reflecting daily. Somewhat surprisingly, 63% of respondents said they would like to continue this study until things are back to some kind of "normal", and most would recommend others join the study (average of 7.5 out of 10 on the question "Would you recommend participating in this study to your colleagues?").

Addressing Challenges

Since we had daily data around challenges, wanted to help as much as possible, and had a forum for getting feedback from our employees, we started implementing pilot changes as early as possible to address the issues engineers were reporting.

The first week, "Internet Connection" and "Remote Connection" were quite high and we had quantitative data that connection was a problem. Within 72 hours the organization's engineering team created a WFH Wiki that had how-to guides for configuring remote connection, fixing power settings, best practices, etc. The organizations management also encouraged engineers to upgrade their internet in order to work efficiently and keep receipts. The company also created an email alias people could reach out to 24 hours a day Monday to Friday to get a physical person to go and reboot their machine if needed. This allowed the organization to keep most people working from home while only having a

small number of necessary people in the physical office building. Subsequent weeks showed a significant drop in challenges in these areas.

Later in the study, "Too Many Meetings" and feeling "Overworked" became major challenges. To address these, the leadership implemented multiple solutions based on diary entries. Verbatims from the study suggested some people were in back-to-back Teams meetings with no reason to get up or move around. Typically, in the office, individuals would physically move to a different conference room on the hour or half hour, perhaps even another floor, sometimes passing a restroom or water station. This helped encourage bio breaks and hydration. This quickly disappeared with WFH. The management gave guidance for all 30-minute meetings to begin 5 minutes late, and all 60-minute meetings to begin 10 minutes late. Starting late gave people at least a 5-minute break between meetings. We selected starting late as opposed to ending early as it seemed harder to get people to stop talking then to allow people to join a meeting later. We also instituted No Meeting Friday and encouraged managers to do more formal and informal check-ins with their reports around their wellbeing.

After the first No Meeting Friday, we added an optional question to the study to learn how the change had helped, if at all. 75% of people liked it and 93% of people said it was respected by their manager. In addition, 73% of people said it was good for their wellbeing and 77% said it gave them more focus time. Only 59% of people wanted to do it each week (some verbatims said it made their Thursday or Monday too meeting heavy). The organization used this data to implement No Meeting Fridays every other week. Verbatims suggested that people felt cared about and like the company thought of them as people and not just numbers **because** of this study and the way management responded to the results on an ongoing basis.

"This is yet another way that [the organization] has been absolutely amazing throughout this experience; this is the only time I've ever felt like our leadership really, genuinely cares about the people in the org (before they said it, but through this [the study] they have really shown it)" — Program Manager

At the 10-week follow-up, we asked how these changes had impacted employees. The below figure shows the results:

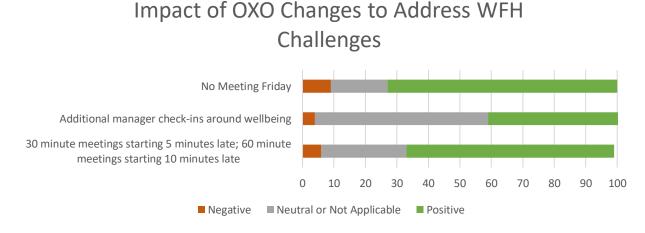


Figure 9 Impact of changes the OXO management made to address WFH challenges. Note: The values do not add to 100 due to rounding.

In addition, 42% of people said just the act of reflecting on their challenges helped them see challenges that they could address (only 20% disagreed with this, and the plurality were neutral). Verbatims from respondents who reported it negatively impacted their feeling of being in control or well-being reported that it was caused by seeing the challenges they were facing, the fact they weren't changing over time, and feeling powerless to do anything.

Overall impact on employees

What is exciting about all of these results, is that doing studies such as this not only gives an organization insight into their employees, ways to help them, and opportunities to make changes, but just the act of doing so can make employees feel better. In fact, during the end of study survey, participants were asked to rank 3 different things from 1 to 5 – their overall wellbeing during the study; their satisfaction with work during this time; and how they feel about their organization. The responses were 3.49, 3.67 and 4.07 respectively. The only question that got above 4.0 was regarding how people felt about the organization itself. This study gave people a chance to reflect on how they were doing, but also to see that their company cared about that. Another verbatim speaks to the multiple benefits of this study:

"Thank you for taking the time to set up and run this study and to present results to management. I'm grateful for having a job at a company where management takes these seriously and does a lot to improve employees' situations. The study has been a place where I feel I can honestly express what didn't go well during the day and what I was happy about. This isn't something I think I can do in my workgroup" — Software Engineer

"This has been a great outlet to report how I'm feeling and then hear how others are feeling. It's great to hear I'm not alone with my frustrations and struggles. Thank you!" – Engineering Manager

Limitations

This study focused on one organization inside a large software company. While we had hundreds of participants, the ability to generalize the results to other development companies, other workers, other contexts, may be limited. There is also a possibility for a self-selection bias in the population, since those people who opted into the study might be those more likely to benefit from reflection. This is a common threat in self-improvement research (E. T. Kersten-van Dijk, 2017). In attempt to mitigate this risk, we opened the study to all members of our engineering organization; stressed that the data would be kept private; offered random prizes for participants; kept the nightly journal small; and stressed that this data could directly help the organization, and in turn, themselves. We hoped this would bring a wide sample of people who wanted to have their opinion matter in decision making.

In order to distinguish those who are not grateful for anything, and those who do not want to fill out that one question, we made both the challenge and gratitude section a required field every night (starting in week 3; see Methods for more explanation). While this meant that people who really faced no challenges, or were not grateful for anything, had to write "none", it also meant that people may

have gotten bored or frustrated with writing the same thing each day if their challenge or gratitude was not changing. We saw this in the end of study survey when we asked people to select their agreement with the statement "The challenges did not improve, but I did not keep reporting them as I did not want to report the same thing everyday". 34% selected either strongly agree or agree for this statement; however 44% disagreed, and many were neutral, so we feel confident that many of the challenges are accurate, and that our measure of "none" is fairly accurate. It is also possible the coding was biased, however we had an expert reviewer review a random sample of codes and found strong consistency (only 2 out of 200 were challenged).

Our results on changes that were made are early stage, as we were not able to do a full experiment, but rather gather information in a one-time format. This allowed for rapid prototyping of potential solutions but does not provide as much strength behind our recommendations.

Lastly, we shared weekly updates with those in the study. It is possible this gave people ideas for challenges or gratitude points they previously would not have thought of. However, we thought the benefits outweighed the risks. We had much positive feedback that seeing how people were struggling week over week helped people feel less isolated, less alone, and less strange for their issues. Since we wanted the study to serve as a wellbeing booster, including these weekly anonymous and aggregated results was important to the goal of the study. It also allowed leadership to implement potential changes quickly, as they received anonymized, aggregate results almost every week. One email we received in response to the shared summaries is:

"Thank you for doing the work to understand and share what we're learning from our "new" work environment. Much appreciated. The verbatims, both good and challenging, really bring it to life. It's great context as I think about how to help our LT support the team." – Chief of Staff

Conclusion

This research sought to identify challenges and points of gratitude experienced by employees of a large software development company during the 2019/2020 Covid-19 pandemic, and the work from home situation it created. Using thematic analysis, we identified areas of gratitude and challenges, and used these to develop early potential interventions for the organization. We piloted some of these interventions and reported on their success. We also studied the impact of simply reflecting, finding that many participants benefited from being in the study simply because it gave them time and space to reflect on their feelings and experiences during this once in a lifetime situation.

Acknowledgements

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