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STRATEGIC LEADERSHIP

Leading the Future of Work

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Top Performers Have a Superpower: Happiness

A large-scale study found that well-being predicts outstanding job performance.

BY PAUL B. LESTER, ED DIENER, AND MARTIN SELIGMAN

The toll that working through the global pandemic has taken on employees' job satisfaction and emotional well-being has focused business leaders on fostering workforce happiness as never before.

While many — if not most — of us are motivated by genuine caring for the people who power our organizations, we also intuitively know that employee happiness should boost job performance. Still, two nagging questions remain: Which comes first, succeeding and then being happy, or being happy and then succeeding? And just how *much* does initial happiness matter?

The results of our recent research, published in the *Journal of Happiness Studies*, have gotten us one big step closer to answering those two questions. For our study, we followed almost 1 million U.S. Army soldiers for nearly five years. We first asked them to rate their well-being — their happiness, if you will — along with their optimism, and then tracked which soldiers later received awards based on their job performance. We collected our data in the midst of the wars in Iraq and Afghanistan, so the stakes were high: Some of those awards were for exemplary assigned job performance, while others were earned for extraordinary performance in heroic actions. Receiving an award in the Army, either for exemplary job performance or for heroism, is a relatively rare event. Of the nearly 1 million soldiers in our sample, only 12% received an award of any type during the five years that we ran the study.

While we expected that well-being and optimism would matter to performance, we were taken aback by just how much they mattered. We saw four times as many awards earned by the initially happiest soldiers (upper quartile) compared with those who were unhappiest initially (lower quartile) — a huge difference in performance between those groups. This gap held when we accounted for status (officers versus enlisted soldiers), gender, race, education, and other demographic characteristics.¹ In fact, happiness — and, to a somewhat lesser extent, optimism — were better predictors of awards than any demographic factor we examined.



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THE

RESEARCH

The researchers followed nearly 1 million U.S. Army service members for five years, measuring their relative happiness and optimism using 25 questions drawn from PANAS and the Life Orientation Test. The questions were included on a larger survey taken by every Army soldier each year.

This well-being measurement combines individuals' own self-assessments and their reporting on the frequency of positive and negative emotions experienced, to yield the researchers' measure of happiness.

Even after the researchers controlled for previous performance and a range of demographic factors, soldiers who were the happiest and most optimistic went on to earn significantly more job performance awards across the next five years compared with those who were initially unhappy and pessimistic.

You might dismiss these results if you believe that military data somehow doesn't apply to the business world, but you would be wrong to do so. After all, the U.S. Department of Defense is the single largest employer in the world, dwarfing Walmart by nearly 1 million employees. It has nearly \$3 trillion in total assets (compared with Walmart's \$236 billion) and maintains over \$290 billion in inventory (compared with Walmart's \$44 billion). The U.S. military is not just "big business"; it is, in fact, the biggest business by an order of magnitude, so what we learn from the military can and often does apply to the business world. There are over 190 distinct job categories in the Army — from clerk to pilot, cook to commander — and most were included in our data.

In short, not only do happiness and optimism matter to employee performance, but they matter a lot, and both *predict* how well employees will do. Our military research, along with other behavioral science research spanning the past 40 years, highlights the competitive advantage that employee happiness offers businesses. There are some things about employee happiness that every business leader should know and be able to apply. And, as we emerge from a demoralizing global pandemic, we would all do well to take stock of how to influence the happiness and optimism of those around us in the workplace.

That raises the question, what really is happiness? The behavioral science literature often refers to happiness as *subjective well-being* because the meaning of happiness varies in different contexts. As with most concepts that emerge from psychology, definitions vary, but when it comes to happiness, they generally coalesce around three areas: a person's own assessment of their satisfaction with life; how much positive emotion (such as enjoyment, enthusiasm, inspiration, or pride) they experience; and how little negative emotion (such as hostility, irritability, fear, or nervousness) they experience.² We combined these three to yield our measure of happiness.

What Do We Know About Happiness?

Since the advent of positive psychology in 2000, there has been a tremendous amount of research in the field, with well-being mentioned in over 170,000 academic articles.³ Some of that work has found that there is truth to the perception that some people just seem happier, and researchers

have looked closely at heritability (factors we're born with) and how our environment shapes our happiness. If we think of general happiness as a pie, then the research suggests that heritability accounts for about 40% of that pie while 60% is attributed to other factors, especially life experiences. Nearly the same can be said for the workplace: In a recent long-term study, researchers found that while heritability accounted for about 30% of job satisfaction at age 21, the importance of heritability dropped to less than 20% when measured again at ages 25 and 30. Thus, environmental factors within the workplace become *more important* over time.⁴

The relative importance of some of those environmental factors has shifted recently. The "World Happiness Report 2021" noted that within the workplace, happiness before the pandemic was largely due to employees' sense of belonging within an organization and among coworkers, the flexibility afforded to workers, inclusivity, and a sense of purpose to their work (in descending order of importance).⁵ Things changed dramatically during the pandemic: Having a supportive manager became the largest predictor of happiness — nearly twice as important as the next ranked workplace happiness factor, purpose.

Not surprisingly, money matters to employee happiness too — but research has shown that is chiefly for those employees who indicated that money is important to them. In a recent study, the relationship between income and happiness was over four times greater for people who reported that money was important to them compared with those who cared much less about money.⁶ Thus, for employees who aren't driven by money, income may merely be a hollow way to keep score.

Within the workplace, we know that happier employees are more likely to emerge as leaders, earn higher scores on performance evaluations, and tend to be better teammates.⁷ We also know, based on substantial research, that happier employees are healthier, have lower rates of absenteeism, are highly motivated to succeed, are more creative, have better relationships with peers, and are less likely to leave a company.⁸ All of these correlates of happiness significantly influence a company's bottom line.

Taken together, the data indicates that there is a lot of room for leaders and organizations to influence

happiness within the workplace. While happiness is influenced by heritability and drivers like finding a sense of meaning, a larger portion of the happiness pie may result from factors like workplace flexibility, reasonable pay, type of work, and managers who are supportive. That means it's possible for leaders to shape the workplace to make happier employees.

What Can Business Leaders Do About Employee Happiness?

To begin, we suggest that leaders follow the science and take a structured approach to hiring for, promoting, and developing employee happiness. While the approach will vary based on organizational needs, leaders should commit to three actions.

1. Measure happiness in both employees and job candidates. In many ways, “hiring the happy” requires a bit of perspective. While we do not believe that happiness should be placed ahead of the knowledge, skills, or talent needed for a job, we conservatively advocate using measures of happiness and optimism as discriminators, or tiebreakers, because the risks are low and the benefits could be important. It is also important to use proven assessment tools and not rely on management intuition based on an employee's affect. Many organizations already use a variety of surveys to evaluate job candidates. Even if adding these questions about happiness and optimism to the applicant survey results in only a small increase in downstream productivity and profitability, most leaders would jump at this opportunity, because it costs almost nothing. While this will of course vary across organizations and sectors, most organizations are likely better off hiring someone who is already relatively happy and optimistic, because they will influence exceptional performance and reduce turnover. If you extrapolate our findings from the military study to a private sector context where 1,000 hires are going to be made, using well-being as a hiring criterion should lead to about 11 more exceptional performers than if the company simply hired personnel without considering well-being at all.

Beyond hiring, employee happiness should also be a consideration when measuring organizational performance. Yes, objective performance still matters greatly. But, while a high-performing division within a company may bring short-term profit, if that performance was driven by toxic leadership

and management practices, then those profits could evaporate quickly if employees were to leave in response. Unwarranted attrition is expensive. The U.S. military, for example, has caught on to this and has fired commanding officers who have fostered poor organizational climates, and at times it has done so preemptively, before a catastrophic event could occur. After all, it costs several hundred

WHY FINDINGS FROM A STUDY OF THE MILITARY MATTER TO ALL EMPLOYERS

The findings from our study are broadly applicable because the sample we used was not drawn from a specific functional area, such as salespeople or IT professionals, as is often the case in the published research on happiness in the workplace. Rather, while some soldiers in our study worked in typical Army jobs, such as those found in the infantry, many more were office workers, truck drivers, police officers, medical professionals, logistics experts, pilots, engineers, and strategists, among others. Thus, our measurement of so many professions at this scale and in a single study is unique and makes our results highly applicable to the business world. In short, happiness mattered across the work spectrum. The sample matters for other reasons, too. Because it was huge and ran for five years — at nearly 1 million people, it's the largest long-term well-being study ever done — we could perform more detailed analyses with the data and show that the findings held true regardless of demographics, as described above.

Unlike most research studies, ours did not simply examine performance in the aggregate. Rather, we examined the influence of happiness on *exceptional performance*, given that we homed in on only 12% of our total sample — those who had received an award for their exemplary performance at work. Unhappy soldiers did earn performance and heroism awards, but only one-fourth as many as those who were initially happy. The implication for business is that happier employees receive a disproportionate amount of recognition for exceptional performance and become the organization's superstars. The Pareto principle asserts that 80% of outcomes arise from 20% of causes. If we apply it to our research, we can see that using happiness and optimism (which predicted awards just about as well as happiness) to help identify, hire, and retain employees will likely lead to the emergence of a few more superstars — and will likely have a significant impact on the bottom line.

Finally, the awards included in the study varied in type, organizational meaning, and impact level, demonstrating that the link between happiness and performance held for many different kinds of accomplishments. The rigorous scrutiny and documentation that precedes the bestowing of a military award further strengthens the case for these awards as highly reliable indicators of performance. And, perhaps most important, none of the earned awards were tied to monetary compensation. In the U.S. Army, if you earn a Silver Star for heroism in combat or a Meritorious Service Medal for successfully leading a training battalion, you don't get a \$10,000 bonus. In other words, the awards reflect performance driven by intrinsic motivation, not by explicitly extrinsic financial rewards.

Though the biggest accomplishment of this study might be linking happiness to exemplary performance, it also replicates several findings from previous research. While replication may not be headline grabbing and is rarely rewarded in academia, it is foundational to science. At this moment, the behavioral science field is facing a crisis in replication, calling into question the validity of many long-standing leadership, management, and behavioral theories that are taught at most MBA programs. Indeed, the Open Science Collaboration found in 2015 that less than 40% of seminal behavioral science experiments could be replicated.¹ Conversely, our findings are highly accurate, represent long-term results, and encompass many jobs.

thousand dollars and years of effort to recruit and train a nuclear reactor engineer, and much more to do the same for an aviator. Losing even a few to unhappiness borne from toxic leadership is expensive and creates personnel shortages that increase the risk to those who remain. Attrition and talent shortages in a corporation have similar negative effects. Thus, we advocate treating happiness as an objective performance outcome of the organization, as well as a leading indicator of leadership success. In our study, we used one of the gold-standard measures of well-being, the Positive and Negative Affect Schedule (PANAS), which has been used in thousands of published studies to examine happiness in a variety of contexts. It takes about 10 minutes to complete it.⁹

2. Develop happiness in your workforce. Given all the training and development requirements placed on most organizations, the thought of actively trying to develop happier employees may initially seem daunting, time consuming, and expensive. However, the academic literature repeatedly shows that training initiatives targeting employee well-being do not require a significant time investment, are cost effective, and carry a high ROI.

Here are three examples of simple exercises, each backed by rigorous evidence of effectiveness. In the first, the Gratitude Visit, participants prepare and present a 300-word testimony of gratitude to someone who changed their life for the better. In the second, Three Good Things, participants write down three things that went well each day and what caused those things to go well, for one week. The third, Using Signature Strengths in a New Way, calls on participants to complete an online strengths survey and then use one of their top strengths in a new way each day for at least a week. Research testing these approaches found that the Three Good Things and Signature Strengths exercises significantly increased happiness and decreased depression over six months, while Gratitude Visit did the same over one month.¹⁰ Of course, such workplace happiness initiatives work best when people *want* to become happier, are willing to put some effort into the process, and believe that those efforts will pay dividends.¹¹ That aside, the costs are quite low, the interventions can occur at any level of an organization, and they don't require outside consultants.

For organizations willing to make a larger investment, there are of course turnkey, validated programs shown to improve employee well-being. During the height of the wars in Iraq and Afghanistan, for example, the U.S. Army invested heavily in resilience initiatives such as Comprehensive Soldier Fitness, which was demonstrated to improve the psychological health of service members.¹² The program included extensive training for a large cadre of instructors, resulting in an overall ratio of about 1 trainer for every 100 service members.¹³ Likewise, the Enduring Happiness and Continued Self-Enhancement (ENHANCE) program was shown to improve happiness, with effects lasting for over six months. ENHANCE is a 24-hour training package that can be delivered in person or online and focuses on identifying core values, cultivating mindfulness, establishing positive social relationships, dealing with negativity and adversity, and other areas.¹⁴

Our recommendation: First, measure well-being. Next, start with the easy exercises to demonstrate that the company values employee well-being. Then start investing in the more formal programs over time as happiness increases.

3. Retain employees who are happy. The pandemic has reminded us of some tough realities, namely that organizations can contract in turbulent times just as fast as they expand when the economy is booming. Clearly, our military study shows that organizations should *want* happy employees, because they perform significantly better than those who are unhappy. But it turns out that organizations also need happy employees, because happiness is in fact *contagious*. For example, researchers examined 20 years of data from 4,700 participants in the long-running Framingham Heart Study and discovered not only that happiness can spread across a social network, but also that happy people are much more connected to other happy people within the network. Perhaps the most striking finding of this study was that the effect of happiness extended for three degrees of separation from the focal person (so, friends of their friends' friends).¹⁵ Another important finding from this study is that like happiness, *unhappiness* is also contagious. This contagion effect places leaders in a precarious position, especially if they are presented with the difficult scenario of being able to retain only one of two employees. With

performance and other factors held constant, they should keep the one who is happiest.

Lead by Example

Our work with the Army over the past decade consistently uncovered a foundational truth: Employee well-being initiatives work best when confident leaders present the material and when senior leaders place significant emphasis on the overall effort.¹⁶ Thus, leaders must be willing to invest their efforts into making the initiatives successful by not only advocating for them — for example, by securing resources for a program and promoting positive strategic messaging — but also by participating in the training and incorporating it into their own behaviors. If leaders want to improve employee happiness, they must model that which is taught so that it becomes integral to the organization's lexicon and culture. We learn best by watching others, so let your employees learn to be happy by watching you.

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REFERENCES

1. P.B. Lester, E.P. Stewart, L.L. Vie, et al., "Happy Soldiers Are Highest Performers," *Journal of Happiness Studies*, Aug. 25, 2021, <https://doi.org/10.1007/s10902-021-00441-x>.
2. E. Diener, "Subjective Well-Being: The Science of Happiness and a Proposal for a National Index," *American Psychologist* 55, no. 1 (January 2000): 34-43.
3. E. Diener, R.E. Lucas, S. Oishi, et al., "Advances and Open Questions in the Science of Subjective Well-Being," *Collabra: Psychology* 4, no. 1 (May 2018): 1-15.
4. W. Li, K.C. Stanek, Z. Zhang, et al., "Are Genetic and Environmental Influences on Job Satisfaction Stable Over Time? A Three-Wave Longitudinal Twin Study," *Journal of Applied Psychology* 101, no. 11 (November 2016): 1598-1619.
5. J.F. Helliwell, H. Huang, S. Wang, et al., "Happiness, Trust, and Deaths Under COVID-19," in "World Happiness Report 2021," eds. J.F. Helliwell, R. Layard, J.D. Sachs, et al. (New York: Sustainable Development Solutions Network, 2021): 13-56.
6. M.A. Killingsworth, "Experienced Well-Being Rises With Income, Even Above \$75,000 Per Year," *Proceedings of the National Academy of Sciences* 118, no. 4 (January 2021): 1-6.
7. E. Diener and W. Tov, "National Accounts of Well-Being," in "Handbook of Social Indicators and Quality of Life Research," eds. K.C. Land, A.C. Michalos, and M.J. Sirgy (London: Springer, 2012): 137-157.
8. E.R. Tenney, J.M. Poole, and E. Diener, "Does Positivity Enhance Work Performance? Why, When, and What We Don't Know," *Research in Organizational Behavior* 36 (2016): 27-46.
9. The PANAS, along with the Optimism Test, Satisfaction With Life Questionnaire, VIA Survey of Character Strengths, and many other assessments, can be found at www.authentichappiness.org.
10. M.E.P. Seligman, T.A. Steen, N. Park, et al., "Positive Psychology Progress: Empirical Validation of Interventions," *American Psychologist* 60, no. 5 (July-August 2005): 410-421.
11. E. Diener, S.J. Heintzelman, K. Kushlev, et al., "Findings All Psychologists Should Know From the New Science on Subjective Well-Being," *Canadian Psychology* 58, no. 2 (May 2017): 87-104.
12. P. B. Lester, P. D. Harms, M.N. Herian, et al., "The Comprehensive Soldier Fitness Program Evaluation. Report #3: Longitudinal Analysis of the Impact of Master Resilience Training on Self-Reported Resilience and Psychological Health Data," PDF file (Lincoln, Nebraska: Public Policy Center, University of Nebraska, December 2021), <https://digitalcommons.unl.edu>.
13. R. Cornum, M.D. Matthews, and M.E.P. Seligman, "Comprehensive Soldier Fitness: Building Resilience in a Challenging Institutional Context," *The American Psychologist* 66, no. 1 (January 2011): 4-9.
14. S.J. Heintzelman, K. Kushlev, L.D. Lutes, et al., "ENHANCE: Evidence for the Efficacy of a Comprehensive Intervention Program to Promote Subjective Well-Being," *Journal of Experimental Psychology: Applied* 26, no. 2 (June 2020): 360-383.
15. J.H. Fowler and N.A. Christakis, "Dynamic Spread of Happiness in a Large Social Network: Longitudinal Analysis Over 20 Years in the Framingham Heart Study," *The BMJ* 337, no. a2338 (2008): 1-9.
16. Lester, Harms, Herian, et al., "The Comprehensive Soldier Fitness Program Evaluation."
- i. Open Science Collaboration, "Estimating the Reproducibility of Psychological Science," *Science* 349, no. 6251 (Aug. 28, 2015).

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The Surprising Impact of Meeting-Free Days

Ben Laker, Vijay Pereira, Pawan Budhwar, and Ashish Malik

Many organizations are implementing no-meeting days, but finding the optimal weekly balance requires deliberation.



Even before the pandemic, 71% of managers thought meetings were costly and unproductive. Since many companies have shifted to remote and hybrid workplace models, meetings have steadily increased in frequency and length to compensate for the loss of in-person interactions. Today's knowledge workers typically spend more than 85% of their time in meetings, which studies show negatively affects people's psychological, physical, and mental well-being.

Though building trust and achieving team cohesion rely on frequent, quality interactions, meetings are no longer the best way to accomplish this. As a result, many organizations, including Facebook and Atlassian, are taking a stand by adopting no-meeting days, during which people operate at their own rhythms and collaborate with others at a pace and on a schedule that is convenient, not forced.

Assessing the Effects of No-Meeting Days

We recently surveyed 76 companies, with more than 1,000 employees each and operations in more than 50 countries, that had introduced from one to five no-meeting days per week (prohibiting even one-on-one meetings) during the past 12 months. In addition, we spoke with managers and each company's HR director to obtain executive perspectives on the approaches taken; examined data comparing employee stress levels before and after a reduction in meetings; and assessed the subsequent impact on productivity, collaboration, and engagement, using pulse surveys.

Nearly half (47%) of the companies we studied reduced meetings by 40% by introducing two no-meeting days per week. The remaining companies attempted something even more ambitious: 35% instituted three no-meeting days, and 11% implemented four. The remaining 7% eradicated meetings entirely.

The subsequent impact of introducing meeting-free days was profound, as outlined in the table below. When one no-meeting day per week was introduced, autonomy, communication, engagement, and satisfaction all improved, resulting in decreased micromanagement and stress, which caused productivity to rise.

When meetings were reduced by 40% (the equivalent of two

days per week), we found productivity to be 71% higher because employees felt more empowered and autonomous. Rather than being pinned down by a schedule, they owned their to-do lists and held themselves accountable, which consequently increased satisfaction by 52%.

While it may seem counterintuitive, our research concluded that having too many meetings detracts from effective collaboration, derails workers during their most productive hours, and interrupts people's train of thought. Consequently, removing 60% of meetings — the equivalent of three days per week — increased cooperation by 55%. Workers replaced meetings with better ways of connecting one-on-one, at a pace suitable for them, often using project management tools to aid communication. In doing so, the risk of stress decreased by 57%, which improved employees' psychological, physical, and mental well-being.

For companies that instituted four meeting-free days a week, we found that the potential for micromanaging lessened by 74%: People felt valued, trusted, and 44% more engaged and, consequently, worked harder for their company. With zero meetings occurring four days per week, communication was 65% clearer and substantially more effective. There were far fewer misunderstandings between colleagues; people would quickly check a previous Slack conversation or a project outline to review an assignment or request. Phrases like "I thought you told me ..." or "I was under the impression ..." were rarely used.

While our data highlights the importance of moving toward a no-meetings policy because of the benefits, there are also some unintended consequences caused by the law of diminishing returns. Therefore, managers need an understanding of what works for their unique contexts to maximize the full benefits of a no-meeting strategy. The advantages of no-meeting periods begin to plateau after meetings are reduced by 60% and actually wane beyond that. For example, satisfaction, productivity, engagement, and cooperation all decline when meetings are eliminated entirely.

Thus, we conclude that the optimum number of meeting-free days is three, leaving two days per week available for meetings, for two reasons: maintaining social connections and managing weekly schedules.

Meetings offer an opportunity to socialize. A no-meetings period is an implicit removal of opportunities to connect — even though meetings are not the organic way in which humans interact with one another. In remote working environments, the [risk of isolation](#) is exceptionally high, and therefore managers must [deliberately create opportunities for socialization](#). Informal, no-agenda meetings can effectively fulfill humans' need for social contact.

No matter the schedule proposed, the transition to a limited number of meeting days will require some scheduling creativity. This is because these sorts of work productivity hacks, if not taken seriously, can simply lead people to push meetings to a different day. If not dealt with, this spillover effect can result in scheduling overload and become a regular stressor for you and your employees. Not meeting on some days and packing all meetings into another day does not solve anything.

Implementing a No-Meetings Practice

If you're looking to deploy a no-meetings policy or adjust your existing one, here's how.

Connect with your team. The first step is soliciting feedback before launching changes to current meeting practices. You can do this by circulating the premise behind and reasoning for no-meeting periods. Those working cross-functionally on projects may give you some pushback, so offer a clear, compelling reason for introducing this new policy to everyone's weekly schedules. Maybe several team members are working on complex projects that require more time to think challenges through — or perhaps everyone's schedules have become too packed with meetings to meet rigorous work deadlines.

Encourage informality. Humans are storytellers, so allow your staff members to be who they are. Our research found it beneficial for memes, current affairs, sports, celebrity news, holiday plans, and emojis to be shared and discussed on internal communications platforms. Employees see such informal interactions as extensions of themselves and believe the work environment should allow them to express the totality of who they are. When informal conversations

flow in your company, barriers of formality are removed; most questions (87%) get answered at the virtual watercooler — such as a message board — or on a direct-messaging platform such as Slack or Teams, and meetings become a thing of the past. Providing a forum for social venting, storytelling, or unwinding together is always appreciated, we found.

Practice better meeting hygiene. Companies' main challenge when making this transition is finding a new, organized way to collaborate. It can be easy to fall back into old patterns, so provide ground rules to help employees adapt to the new approach.

Ensure that every meeting has a clear agenda and expected outcome. Meetings that lack these two elements probably weren't thoroughly thought through and, as the saying goes, could probably have just been an email. Encourage your team to cancel meetings that aren't the best use of their time; being judicious about which meetings add value and which aren't can help free up their calendars even more.

Assigning roles, such as a notetaker or a timekeeper, to help people stick to the agenda is also an advantageous practice, especially for meetings involving larger groups. Send clear bullet point recaps after each meeting: Documenting meeting highlights, questions, and essential tasks can keep

your team accountable and prevent repeated discussions of issues that were already covered.

Ultimately, no-meetings policies allow for efficient collaboration while preventing focused, heads-down work from being disrupted. We observed that employees do appreciate these policies, which allow them to excel without breaking their momentum. After an adjustment period, most teams see the value in making meetings an infrequent occurrence, particularly if they occur only two days per week. With meetings yielding so little return on time investment, the opportunity cost is too high not to act now.

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Percentage Change in Employee Ratings After Introduction of Meeting-Free Days

Regardless of the number of meeting-free days instituted, employees subsequently reported improvements in factors like autonomy and cooperation and decreases in stress and micromanagement. But arguably, the best results were achieved at companies that had three meeting-free days per week.

VARIABLE	MEETING-FREE DAYS PER WEEK				
	1	2	3	4	5
Autonomy	62%	78%	83%	86%	88%
Communication	45%	57%	61%	65%	68%
Cooperation	15%	43%	55%	58%	52%
Engagement	28%	32%	41%	44%	27%
Micromanaging	-33%	-52%	-68%	-74%	-63%
Productivity	35%	71%	73%	74%	64%
Satisfaction	48%	52%	65%	62%	42%
Stress	-26%	-43%	-57%	-63%	-75%

Why Every Leader Needs to Worry About Toxic Culture

Donald Sull, Charles Sull, William Cipolli, and Caio Brighenti

Pinpointing the elements of toxic culture in an organization can help leaders focus on addressing the issues that lead employees to disengage and quit.



Toxic culture, as we reported in a recent article, was the single best [predictor of attrition](#) during the first six months of the Great Resignation — 10 times more powerful than how employees viewed their compensation in predicting employee turnover.¹ The link between toxicity and attrition is not new: By one estimate, employee turnover triggered by a toxic culture cost U.S. employers nearly \$50 billion per year *before* the Great Resignation began.²

While most everyone agrees that toxic workplaces are bad news, there is much less consensus on what makes a culture toxic as opposed to merely annoying. Scholars have proposed multiple, sometimes conflicting definitions of toxic culture, and a quick review of blog posts and managerial articles surfaces dozens of warning signals of toxic culture with little overlap across them.³ In Glassdoor reviews, employees criticize their corporate cultures for

hundreds of flaws — including risk aversion, excess bureaucracy, insularity, and an impersonal feel, to mention just a few.

Employees grumble about a lot of things, but which elements of culture are so awful that they qualify as toxic? You might gripe about an old-school or bureaucratic culture, but is that enough to knot your stomach as you pull into the parking lot in the morning? How can we distinguish between a culture so awful that it qualifies as toxic versus one that's merely irritating?

Pinpointing the elements that make a culture toxic is the first step to improving it. Leaders will dissipate their effort and attention if they try to improve every aspect of corporate culture that some employees find irritating. Instead, they should focus on addressing the core issues that cause employees the most pain and lead them to disengage, bad-mouth their employer, and quit.

To understand what makes a culture toxic, we analyzed the language employees use to describe their organization. When workers write a Glassdoor review, they rate corporate culture on a 5-point scale and also describe their employer's pros and cons. The topics they choose to write about reveal which factors are most relevant to them. By analyzing the relationship between how they describe their employer and how they rate its culture, we were able to shed light on the cultural factors that best predict a toxic culture. We studied

more than 1.3 million Glassdoor reviews from U.S. employees of [Culture 500](#) companies, a sample of large organizations from 40 industries.

In an earlier [analysis of the Culture 500 data](#), we focused on the topics that best predict a company's overall culture rating based on the average of all employee reviews in that organization.⁴ Measuring company-level culture is an excellent way to identify factors that matter to many employees, such as benefits, perks, and job security. Focusing on company-level averages, however, might miss elements of toxic culture that are highly significant for a small percentage of the workforce. Therefore, for this study, we analyzed culture at the individual level.

To home in on what makes a culture toxic for employees, we focused on their negative comments. We used the text analytics platform developed by [CultureX](#) to identify which topics each employee discussed negatively. (We measured 128 topics in total.) We then analyzed which of the topics mentioned had the largest negative impact on how employees rated corporate culture on a 5-point scale.⁵

The Toxic Five Culture Attributes

We grouped closely related elements into broader topics and identified what we call the Toxic Five attributes — disrespectful, noninclusive, unethical, cutthroat, and abusive — that poison corporate culture in the eyes of employees. (See “The Toxic Five.”) While organizational culture can disappoint employees in many ways, these five elements have by far the largest negative impact on how employees rate their corporate culture and have contributed most to employee attrition throughout the Great Resignation.

Noninclusive

Seven of the 20 most powerful predictors of a negative culture rating relate to how well Culture 500 companies encourage the representation of diverse groups of employees and whether they are treated fairly, made to feel welcome, and included in key decisions. Collectively, this cluster of

topics is the most powerful predictor of whether employees view their organization's culture as toxic.

The CultureX platform's assessment of whether organizations provide a fair and inclusive environment for specific demographic groups includes five topics: *gender*, *race*, *sexual identity and orientation*, *disability*, and *age*. All of these identity-related topics rank in the top decile of strongest predictors of a toxic culture. If an employee speaks negatively in a review about how members of the LGBTQ community are treated, for example, their culture rating will be 0.65 lower on a 5-point scale on average.

Two other topics capture comments about exclusion that may or may not be linked to an individual's demographics or identity. The topic *cronyism* includes comments about nepotism and managers playing favorites — for example, by promoting their buddies or graduates from the same college rather than the most qualified candidates. The topic *general noninclusive culture* includes reviews containing terms like “cliques,” “clubby,” or “in crowd” that indicate that some employees are being excluded without specifying why.

None of the diversity, equity, and inclusion topics emerged among the top predictors of a company's *overall* culture in our previous analysis using collective employee ratings. This absence highlights the danger of measuring corporate culture exclusively in aggregate terms. If leaders focus on the average review of corporate culture among employees, they may miss issues that affect a small number of employees in profound ways. Respect, for example, is mentioned 30 times more frequently in employee reviews than LGBTQ equity is, but both topics have the same impact on an employee's view of culture when they are discussed negatively in a review.

Disrespectful

Feeling disrespected at work has the largest negative impact on an employee's overall rating of their corporate culture of any single topic. Surprisingly, mentioning disrespect has a slightly stronger negative impact on the culture rating than when an employee comes right out and describes their culture as toxic (or uses other extremely negative terms, like “dystopian,” “dumpster fire,” or “soul-crushing”).

In our previous research, we found that respect — or the lack thereof — was the single strongest predictor of how employees as a whole rated the corporate culture. This further analysis demonstrates that whether you analyze culture at the level of the individual employee or aggregate to the organization as a whole, respect toward employees rises to the top of the list of cultural elements that matter most.

Unethical

Ethics, like respect, is a fundamental aspect of culture that matters at both the organizational and individual levels. The topic *unethical behavior* captures general comments about integrity and ethics within an organization. The most common terms in reviews classified under this topic include “ethics,” “integrity,” “unethical,” “shady,” and “cheat.” Under a related topic — *dishonesty* — employees described dishonest behavior in dozens of ways, including “lie,” “mislead,” “deceive,” and “make false promises,” as well as adjacent terms that suggest shading the truth, such as “smoke and mirrors” and “sugarcoating.”

The topic *regulatory compliance* includes comments in which employees explicitly discussed their employer’s failure to comply with applicable regulations. Frequently mentioned regulations include the Occupational Safety and Health Administration standards, which protect workers’ safety on the job, and the Health Insurance Portability and Accountability Act, which safeguards sensitive patient information.

Cutthroat

Nearly 10% of employees in our sample made a comment related to teamwork or collaboration in their Glassdoor review. Employees frequently grumbled about uncooperative teammates or the lack of coordination across organizational silos. Comments about friction in coordination, while common, have a very modest impact on how employees rate their corporate culture. These run-of-the-mill frustrations are not clear warning signs of toxic culture.

In contrast, when employees talked about colleagues actively

undermining one another, their comments strongly predicted a negative culture score. The 1% of employees who cited a cutthroat culture employed a vivid lexicon to describe their workplace, including “dog-eat-dog” and “Darwinian” and talked about coworkers who “throw one another under the bus,” “stab each other in the back,” or “sabotage one another.”

Abusive

We define *abusive management* as sustained hostile behavior toward employees, as opposed to a boss who has a bad day and takes it out on team members.⁶ The most frequently mentioned hostile behaviors in our sample are bullying, yelling, or shouting at employees, belittling or demeaning subordinates, verbally abusing people, and condescending or talking down to employees.

Nearly one-third of employees said something about management in their review, but just 0.8% described their manager as abusive. When employees *did* mention abusive managers, however, it depressed their culture rating by an additional 0.50 on average.

When employees join a company, they expect to find a culture that is inclusive, respectful, ethical, collaborative, and free from abuse by those in positions of power. Not only are these baseline elements of a healthy corporate culture, they are also what companies typically promise in their official core values. In an earlier study, we found that “integrity” — mentioned by nearly two-thirds of companies — was the attribute most frequently listed among [companies’ core values](#), while collaboration ranked second, respect fourth, and diversity and inclusion ninth. When corporate culture fails to deliver on these fundamental commitments, employees understandably react with something stronger than annoyance or disappointment.

The High Costs of a Toxic Culture

By identifying the core elements of a toxic culture, we can synthesize existing research on closely related topics, including discrimination, abusive managers, unethical

organizational behavior, workplace injustice, and incivility.⁷ This research allows us to tally the full cost of a toxic culture to individuals and organizations. And the toll, in human suffering and financial expenses, is staggering.

A large body of research shows that working in a toxic atmosphere is associated with elevated levels of stress, burnout, and mental health issues.⁸ Toxicity also translates into physical illness. When employees experience injustice in the workplace, their odds of suffering a major disease (including coronary disease, asthma, diabetes, and arthritis) increase by 35% to 55%.⁹

In addition to the pain imposed on employees, a toxic culture also imposes costs that flow directly to the organization's bottom line. When a toxic atmosphere makes workers sick, for example, their employer typically foots the bill. Among U.S. workers with health benefits, two-thirds have their health care expenses paid directly by their employer.¹⁰ By one estimate, toxic workplaces added an incremental \$16 billion in employee health care costs in 2008.¹¹ The figure below summarizes some of the costs of a toxic culture for organizations. (See "The Organizational Costs of Toxic Culture.")

According to a study from the Society for Human Resource Management, 1 in 5 employees left a job at some point in their career because of its toxic culture.¹² That survey, conducted before the pandemic, is consistent with our findings that a toxic culture is the best predictor of a company experiencing higher employee attrition than its industry overall during the first six months of the Great Resignation. Gallup estimates that the cost of replacing an employee who quits can total up to two times their annual salary when all direct and indirect expenses are accounted for.¹³

Companies with a toxic culture will not only lose employees — they'll also struggle to replace workers who jump ship. Over three-quarters of job seekers research an employer's culture before applying for a job.¹⁴ In an age of online employee reviews, companies cannot keep their culture problems a secret for long, and a toxic culture, as we showed above, is by far the strongest predictor of a low review on Glassdoor.¹⁵ Having a toxic employer brand makes it

harder to attract candidates.

Other costs of a toxic culture are harder to quantify but can still add up. Extremely disengaged employees are nearly 20% less productive than their engaged counterparts because they put in less effort and miss more days on the job.¹⁶ Nearly half of employees who felt disrespected at work admitted to decreasing their effort and time spent at work.¹⁷

Then there's the reputational risk. Among U.S. CEOs and CFOs surveyed, 85% agreed that an unhealthy corporate culture could lead to unethical or illegal behavior.¹⁸ For example, after fraudulent sales practices at Wells Fargo were exposed in 2016, the bank paid billions of dollars in fines and lawsuits and saw its corporate reputation suffer the largest single-year drop in Harris Poll history.¹⁹

Why Every Leader Needs to Worry About Toxic Culture

You might think that toxic culture is somebody else's problem, limited to a handful of high-profile flameouts like Wells Fargo or The Weinstein Company and not something your organization needs to worry about.

Unfortunately, cultural toxicity is widespread. On average, 10% of American employees in large companies mentioned one or more elements of a toxic culture in their Glassdoor reviews in the five years between 2016 to 2020.²⁰ This translates into more than 6,000 miserable workers for the average large American company.²¹ There is a wide spread around that average: Culture 500 companies ranged from 2% to 22% of employees discussing toxicity in their Glassdoor reviews. When 1 out of every 4 employees mentions toxicity, it's fair to say that the corporate culture as a whole is toxic.

Even at companies with the highest Glassdoor ratings, hundreds or thousands of employees might experience the culture as toxic. Women, underrepresented minorities, or older employees, for example, might have a much more negative view of the culture than other employees. In most large organizations, distinctive microcultures coexist within the same company, often across business units, functions, geographies, or acquired companies. Individual leaders also

create subcultures within their extended team. Whatever their origin, microcultures can diverge from the broader corporate culture, which means that even the best cultures can contain pockets of cultural toxicity.

In a forthcoming article, we will lay out concrete steps that leaders can take to detox their corporate culture. The first step, however, is acknowledging that pockets of toxicity exist even in the healthiest corporate cultures. Leaders must dig beneath the rough segmentations (like functions or countries) to assess culture at the level of individual leaders who create — for better or worse — microcultures within the organization as a whole. When measuring corporate culture, averages obscure as much as they illuminate.

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References

1. D. Sull, C. Sull, and B. Zweig, “Toxic Culture Is Driving the Great Resignation,” MIT Sloan Management Review, Jan. 11, 2022, <https://sloanreview.mit.edu>.
2. “The High Cost of a Toxic Workplace Culture: How Culture Impacts the Workforce — and the Bottom Line,” PDF file (Alexandria, Virginia: Society for Human Resource Management, September 2019), <https://pmq.shrm.org>.
3. Academics and management writers have proposed multiple, subjective definitions of what makes a culture or leader toxic. See “Is Your Workplace Tough — or Is It Toxic?” Knowledge@Wharton, Aug. 12, 2015, <https://knowledge.wharton.upenn.edu>; and M. Taventi, “Managing Toxic Leaders: Dysfunctional Patterns in Organizational Leadership and How to Deal With Them,” Human Resource Management 6, no. 83 (June 2011): 127-136.
4. D. Sull and C. Sull, “10 Things Your Corporate Culture Needs to Get Right,” MIT Sloan Management Review, Sept. 16, 2021, <https://sloanreview.mit.edu>.
5. We fit a Bayesian ordinal logistic mixed effects model to predict each review’s culture rating on a 5-point scale. We used 128 culture topics and their associated sentiments as predictors, with company as a random intercept. For each review, each of the topics could take one of three values: It could be discussed positively (1), discussed negatively (-1), or not mentioned at all (blank). The model was fit with 10,000 iterations after burn-in for each of four chains. All R-hat values were <1.007, suggesting convergence of the model across chains. The relative impact each topic had on an employee’s rating of their employer’s culture was measured by the magnitude of the marginal impact a negative topic mention has on an employee’s rating of their organization’s culture on a 5-point scale, holding all other features constant. If an employee says they feel disrespected in their review, for example, their culture rating will be 0.66 lower on a 5-point scale, all else being equal. For reference, the median marginal impact of a negative topic mention was -0.10. The P values for all listed coefficients are less than 0.0001.
6. In his excellent review and synthesis, Bennett Tepper notes that there is no universally agreed-upon definition of abusive management, which overlaps with research constructs, including petty tyranny, supervisor aggression, and supervisor undermining. See B.J. Tepper, “Abusive Supervision in Work Organizations: Review, Synthesis, and Research Agenda,” Journal of Management 33, no. 3 (June 2007): 261-289. There is, however, widespread agreement that abusive management (which Tepper calls “abusive supervision”) consists of sustained nonphysical displays of hostility and typically excludes discrimination or harassment based on gender, race, or other demographic attributes. Common examples of hostile behavior include bullying, yelling at subordinates, swearing, belittling people, or displaying extremely aggressive behavior.
7. The empirical research on these topics is massive, but these recent review pieces provide a useful introduction: M. del Carmen Triana, M. Jayasinghe, and J.R. Pieper, “Perceived Workplace Racial Discrimination and Its Correlates: A Meta-Analysis,” Journal of Organizational Behavior 36, no. 4 (May 2015): 491-513; Tepper, “Abusive Supervision in Work Organizations,” 261-289; R.I. Sutton, “The No Asshole Rule: Building a Civilized Workplace and Surviving One That Isn’t” (New York: Business Plus, 2007); J.J. Kish-Gephart, D.A. Harrison, and L.K. Treviño, “Bad Apples, Bad Cases, and Bad Barrels: Meta-Analytic Evidence About Sources of Unethical Decisions at Work,” Journal of Applied Psychology 95, no. 1 (January 2010): 1-31; J.M. Robbins, M.T. Ford, and L.E. Tetrick, “Perceived Unfairness and Employee Health: A Meta-Analytic Integration,” Journal of Applied Psychology 97, no. 2 (March 2012): 235-272; and L.M. Cortina, D. Kabat-Farr, V.J. Magley, et al., “Researching Rudeness: The Past, Present, and Future of the Science of Incivility,” Journal of Organizational Health Psychology 22, no. 3 (July 2017): 299-313. Research on rudeness and incivility is explicitly framed in terms of violations of norms of respect. See LM Andersson and CM Porath, 1999, “Tit for Tat? The Spiraling Effect of Incivility in the Workplace,” Academy of Management Review, 24 no. 3 (July 1999): 452-471. Other research has established that the components of toxic culture are correlated with one another. In a recent meta-analysis of 105 articles on

incivility, Yao et al. ran a confirmatory factor analysis based on their meta-analytic correlations, and identified a single latent factor with incivility loading at 0.82, abusive supervision (0.63), sexual harassment (0.51), and undermining (which we call cutthroat at 0.50.) J. Yao, S. Lim, C.Y. Guo, et al., 2022, “[Experienced Incivility in the Workplace: A Meta-Analytical Review of Its Construct Validity and Nomological Network](#),” *Journal of Applied Psychology*, 107 no. 2 (Feb. 2022): 193-220.

8. Robbins, Ford, and Tetrick, “Perceived Unfairness and Employee Health,” table 5 for U.S. employees.

9. J. Goh, J. Pfeffer, and S. Zenios, “[The Relationship Between Workplace Stressors and Mortality and Health Costs in the United States](#),” *Management Science* 62, no. 2 (February 2016): 608-628, table 3. Estimate based on odds ratio for self-reported physical illness and physician-diagnosed physical disease for an unfair workplace culture.

10. A.C. Enthoven, “[Employer Self-Funded Health Insurance Is Taking Us in the Wrong Direction](#),” *Health Affairs*, Aug. 13, 2021, www.healthaffairs.org.

11. Goh, Pfeffer, and Zenios, “The Relationship Between Workplace Stressors,” table 7.

12. “The High Cost of a Toxic Workplace Culture,” Society for Human Resource Management, September 2019.

13. Estimated cost of replacing an individual employee includes direct costs (recruiting, signing bonus, background checks) and indirect costs (time required for a new employee to achieve full productivity, knowledge lost when seasoned employees walk out the door), from V. Gandhi and J. Robison, “[The ‘Great Resignation’ Is Really the ‘Great Discontent’](#),” Gallup, July 22, 2021, www.gallup.com.

14. “[Mission & Culture Survey 2019](#),” PDF file (Mill Valley, California: Glassdoor, 2019), www.glassdoor.com. This survey of 2,025 U.S. adults was conducted by The Harris Poll in June 2019.

15. In a separate study, Jason Sockin found that a workplace characterized by disrespect and abuse was the strongest predictor of an employer’s overall rating and its culture and values rating on Glassdoor out of 48 features. See J. Sockin, “[Show Me the Amenities: Are Higher-Paying Firms Better All Around?](#)” CESifo working paper 9842, University of Pennsylvania, Philadelphia, Nov. 5, 2021, table 5.

16. Gallup estimates that actively disengaged employees are looking for another job, and their lower productivity costs their employer 18% of their salary each year. See: Gandhi and Robison, “[The ‘Great Resignation’ Is Really the ‘Great Discontent’](#).”

17. In a survey of 800 managers and employees who experienced incivility in their workplace, nearly half reported that they decreased their work effort and spent less time at work. See C. Porath and C. Pearson, “[The Price of Incivility](#),” *Harvard Business Review* 91, no. 1-2 (January-February 2013): 114-121.

18. J.R. Graham, C.R. Harvey, J. Popadak, et al., “[Corporate Culture: Evidence From the Field](#),” working paper 23255, National Bureau of Economic Research, Cambridge, Massachusetts, March 2017.

19. E. Flitter, “[The Price of Wells Fargo’s Fake Account Scandal Grows by \\$3 Billion](#),” *The New York Times*, Feb. 21, 2020, www.nytimes.com; and “[Harris Poll: Corporate Reputation Politically Polarized as Companies Wrestle With Taking a Stand for Their Values](#),” *The Harris Poll*, Feb. 9, 2017, <https://theharrispoll.com>.

20. Both current and former employees write Glassdoor reviews. In our sample, 10.4% of current employees and 16% of former employees mentioned one or more elements of a toxic culture in their reviews. Our findings are in line with other estimates of the prevalence of toxic workplaces in the U.S. A comprehensive study found that 13% of U.S. employees encountered workplace aggression on a weekly basis. See A.C.H. Schat, M.R. Frone, and E.K. Kelloway, “[Prevalence of Workplace Aggression in the U.S. Workforce: Findings From a National Study](#),” in “*Handbook of Workplace Violence*,” eds. E.K. Kelloway, J. Barling, and J.J. Hurrell (Thousand Oaks, California: Sage, 2006), 47-89. In a Gallup poll, 6% of U.S. and Canadian employees reported that they had been disrespected in the previous 24-hour period. See “[State of the Global Workplace: 2021 Report](#)” (Washington, D.C.: Gallup, 2021), 36. A 2019 survey conducted by the Society for Human Resource Management found that 20% of employees had left a job in the preceding five years. See “The High Cost of a Toxic Workplace Culture,” Society for Human Resource Management, September 2019.

21. The average number of employees in the Culture 500 companies is 64,176, which is very close to 60,629, the average number of employees in the Fortune 500 in 2019. See “[New American Fortune 500 in 2019: Top American Companies and Their Immigrant Roots](#),” *New American Economy*, July 22, 2019, <https://data.newamericaneconomy.org>.

i. Sull, Sull, and Zweig, “[Toxic Culture](#).”

ii. “The High Cost of a Toxic Workplace Culture,” Society for Human Resource Management, September 2019.

iii. Gandhi and Robison, “The ‘Great Resignation’ Is Really the ‘Great Discontent.’”

iv. “[Mission & Culture Survey 2019](#),” Glassdoor.

v. Gandhi and Robison, “The ‘Great Resignation.’”

vi. Porath and Pearson, “The Price of Incivility.”

vii. Goh, Pfeffer, and Zenios, “The Relationship Between Workplace Stressors,” 608-628.

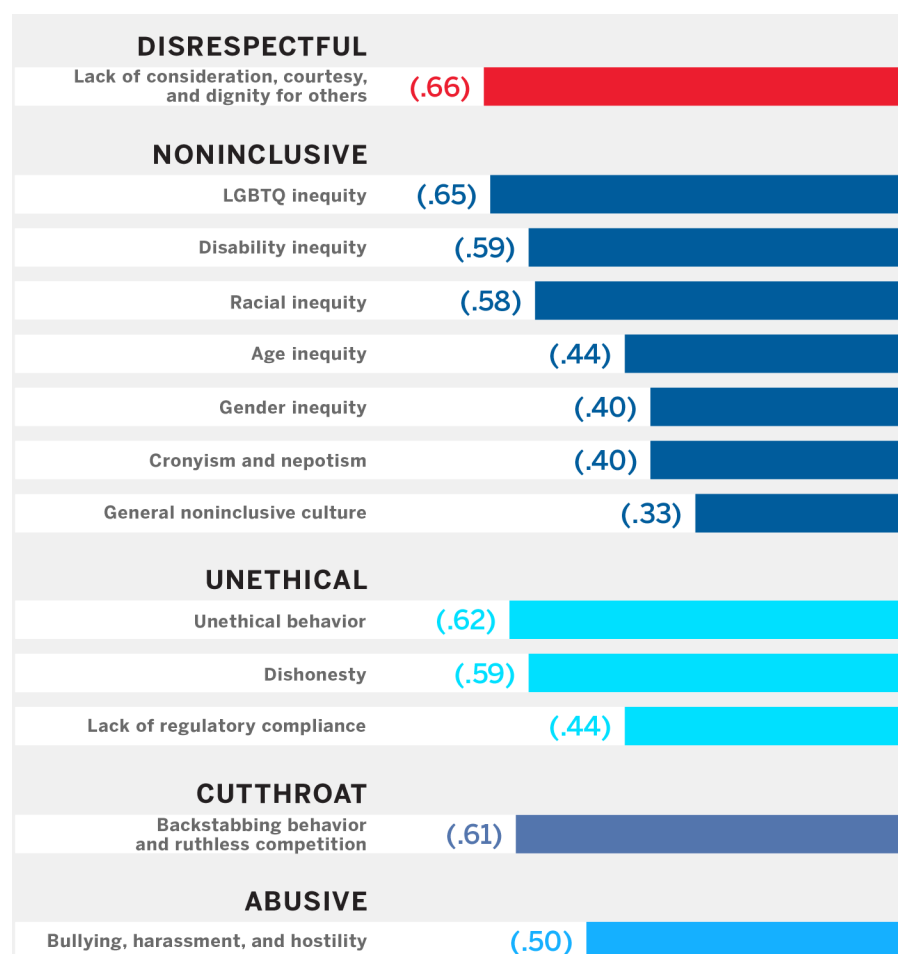
viii. Ibid.

ix. Graham, et al., “Corporate Culture: Evidence From the Field.”

x. L. Guiso, P. Sapienza, and L. Zingales, “[The Value of Corporate Culture](#),”
Journal of Financial Economics 117, no. 1 (July 2015): 60-76.

The Toxic Five

Five attributes — disrespectful, noninclusive, unethical, cutthroat, and abusive — have by far the largest negative impact on how employees rate their company’s culture in Glassdoor reviews. Each bar represents the marginal impact a negative mention of a topic had on an employee’s rating of their organization’s culture. If an employee says they feel disrespected in their review, for example, their culture rating will be 0.66 lower on a five-point scale on average, all else being equal.



The Organizational Costs of Toxic Culture

Employee attrition is higher

- A toxic corporate culture was 10 times more predictive of attrition than compensation during the first six months of the Great Resignation. ⁱ
- Twenty percent of employees have left a job because of its culture. ⁱⁱ
- Replacing an employee can cost companies up to twice the employee's annual salary. ⁱⁱⁱ

A poor employer brand makes it harder to attract talent

- A toxic culture is the strongest predictor of a negative Glassdoor review.
- Seventy-three percent of U.S. job seekers apply to a company only if its corporate culture aligns with their personal values. ^{iv}

Employees are disengaged and less productive

- Three-quarters of the most disengaged employees are looking for a job; this loss of productivity costs companies up to 18% of the employee's salary each year. ^v
- Nearly half of employees who experienced incivility at work decreased their effort and time spent at work. ^{vi}

Higher health care costs hurt the employer's bottom line

- Employees who view their workplace as unfair are 35% to 55% more likely to suffer from major disease. ^{vii}
- Incremental health care costs from toxic workforces were \$16 billion in the U.S. in 2008. ^{viii}

Risk of reputational damage and legal liability is higher

- Eighty-five percent of CEOs and CFOs believe a toxic corporate culture could lead to unethical or illegal behavior. ^{ix}
- Low corporate integrity is associated with lower financial value. ^x

Stop Telling Employees to Be Resilient

Liz Fosslien and Mollie West Duffy

Building teams that can weather uncertainty and change requires creating systems for support and dialogue.



Lately, it feels like “resilience” has popped up as the answer to just about everything. Having a hard time because of a toxic environment? Just be resilient. Struggling to home-school your kids while working 50-hour weeks during a global pandemic? Try some resilience.

Resilience, or the ability to withstand hardship and bounce back from difficult events, *is* useful when it comes to work. But, too often, it’s presented in a way that overlooks structural issues and instead encourages employees to grin and bear whatever tough stuff comes their way — and to do so on their own, without disturbing their colleagues.

The truth is, it’s much, much easier to be resilient in an environment that *makes* it easy. Say your team priorities suddenly shift or everyone has to switch to remote work overnight. You’ll be better able to regroup and gather the energy to figure out a new path forward if you trust your

manager, feel safe opening up to your team, and believe that the organization will work to support you.

In other words, there’s a difference between demanding that everyone be mentally tough and actually helping them take care of their mental health. As the past few years have proved, uncertainty and challenging situations are often beyond our control. But how leaders respond — that is, whether they make work a place where employees feel supported, or push them until they burn out and give up — is not. Based on the research and interviews we conducted for our new book, *Big Feelings: How to Be Okay When Things Are Not Okay*, we’ve pulled together five actions leaders can take to create a workplace that supports resilience.

1. Make well-being a collective practice.

Teams can put shared practices into place that make it easier for individuals to improve their well-being. Ask yourself: How can my team better incorporate balance as part of our days? Saying you want your people to have a healthy work-life balance is great, but if their calendars are filled with back-to-back meetings and they get pinged at all hours of the day, chances are they won’t feel safe taking the breaks they need.

To improve team well-being, establish shared rituals. When everything feels up in the air, rituals can help employees feel more grounded — and less stressed. It doesn’t matter what the ritual is: [Research shows](#) that simply doing the same

thing at the same time can improve mental health.

A couple of ideas we've heard from teams: Kick off weekly team meetings with a fun prompt, make a shared commitment to not schedule video calls with each other on one or two afternoons a week, and put 15-minute team breaks on the calendar every day. We also heard from one leader that she's found it useful to give her team the first five minutes of their regular meeting to turn off their cameras and do something that will help them be more present, whether that's responding to the email burning a hole in their inbox or getting up to stretch.

2. Look back at how far you've come as a team.

A ritual around reflection and recognition can also help your team members connect and build confidence. Successfully navigating change or uncertainty as a team is not about having the perfect plan in place but about trusting that you can weather surprises together.

To take stock of all that your team has accomplished, set aside time at the end of each month or quarter to discuss the following:

- What have we learned over the past few weeks or months?
- What was difficult, and how would we approach it differently given what we know now?
- What important progress did we make?

Keep in mind that an important part of progress is lessons learned. If your team had to rapidly pivot toward a new goal, you're not "behind" where you're supposed to be. It means you're moving in a new direction, this time with experience.

3. Use one-on-one meetings wisely.

If your one-on-ones focus solely on status updates, you're missing out on a valuable opportunity to better understand and support your team members. Worse, you might be inadvertently sending the message that you care only about pressing tasks and to-dos, which can leave your reports feeling expendable and anxious.

Find an alternative channel for status updates (think email, Slack threads, or brief team meetings) to leave more room for personal conversations in one-on-ones. We recommend asking these questions:

- What one thing can I do to better support you this week?
- What kind of flexibility do you need right now?
- How does your workload feel right now? Where can I help?
- What was a win for you over the past week? What was challenging?

Make sure to take action on what you hear, and communicate the steps you'll take. For example, you might say, "You mentioned last week that you could use more heads-down time. Let's work together to see if there are any upcoming meetings that could be handled asynchronously or that you could push to next week."

4. Understand and adjust for different emotional expression tendencies.

While it's important to create space for your employees to flag feelings or raise concerns, you shouldn't *push* them to do so. If things get challenging or the future seems uncertain, let your reports know that you're there to support them, but make it OK for them to *not* open up to you in great detail.

When it comes to how comfortable we are expressing emotions, we each sit somewhere along a spectrum. On one end are *over-emoters*, or people who are highly emotionally expressive. People always know what over-emoters are feeling and tend to turn to them when they want someone to be excited. On the other end are *under-emoters*, or people who are less emotionally expressive. People feel they can go to under-emoters if they are upset or have a problem, since the under-emoter will be able to calmly figure out a way forward. Even-emoters sit in the middle but can swing either way, depending on the situation. None of these tendencies is "good" or "bad," but it's useful to be aware of where on the spectrum your reports (and you!) sit so you can adjust your behavior as needed. (We've created an [emotional expression tendency assessment](#) that you can use and share with your

team.)

For example, say one of your reports is an under-emoter. If she's feeling overwhelmed by the amount of uncertainty she's facing, she won't wear that emotion on her sleeve, and she likely won't bring it up in a one-on-one conversation on her own. So as her boss, you'll need to dig a bit deeper by asking questions like, "What part of your job is keeping you up at night?" or "What should I know about that I don't know about?"

5. Create shared language.

To make it easier for employees to feel safe opening up and trusting one another, it's helpful to establish shared language. For example, teams at the executive coaching firm Reboot use a "red, yellow, green" system to check in at the beginning of meetings. Red means someone is struggling; yellow means someone feels stressed, but it's manageable; and green means someone is feeling good.

We've also worked with teams to help them create "It's OK to ..." lists. The idea comes from writer Giles Turnbull, who wanted new employees at the U.K.'s Government Digital Service to know that it was always OK to do things like make mistakes or ask a question. He drafted a list, crowdsourced more ideas from his colleagues, and then designed posters that he hung in the office. The final "It's OK to ..." list included things like "say you don't understand," "have quiet days," and "ask why, and why not."

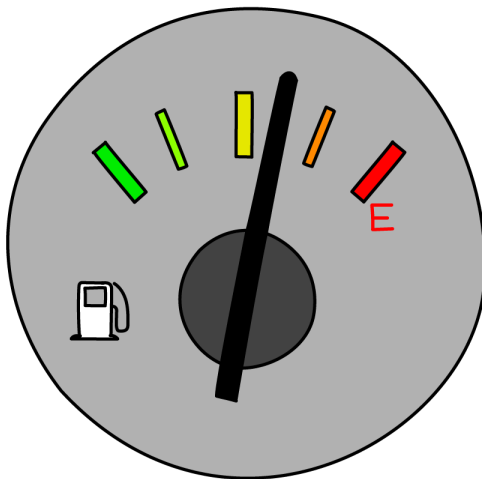
"It's OK to ..." lists surface permissions that might already exist within the company culture but might be helpful to remind people of — especially in uncertain times and when onboarding new employees. In addition to sharing team documents, individuals can share work style preferences with one another (see our [work preferences template](#)) to support them in doing their best work.

Uncertainty and change are inevitable. But by putting the practices listed above into place, leaders can create environments for their people that make it easier for them to be resilient. Ultimately, the best and most successful workplaces are those that ensure people feel supported through difficult times.

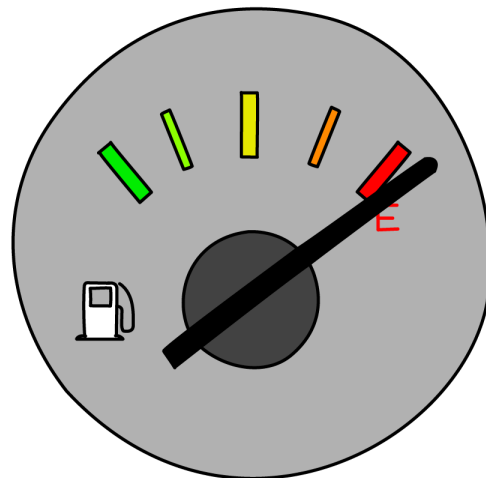
About the Authors

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WHEN WE SHOULD
TAKE A BREAK



WHEN WE ACTUALLY
TAKE A BREAK



LIZ FOSSLIE

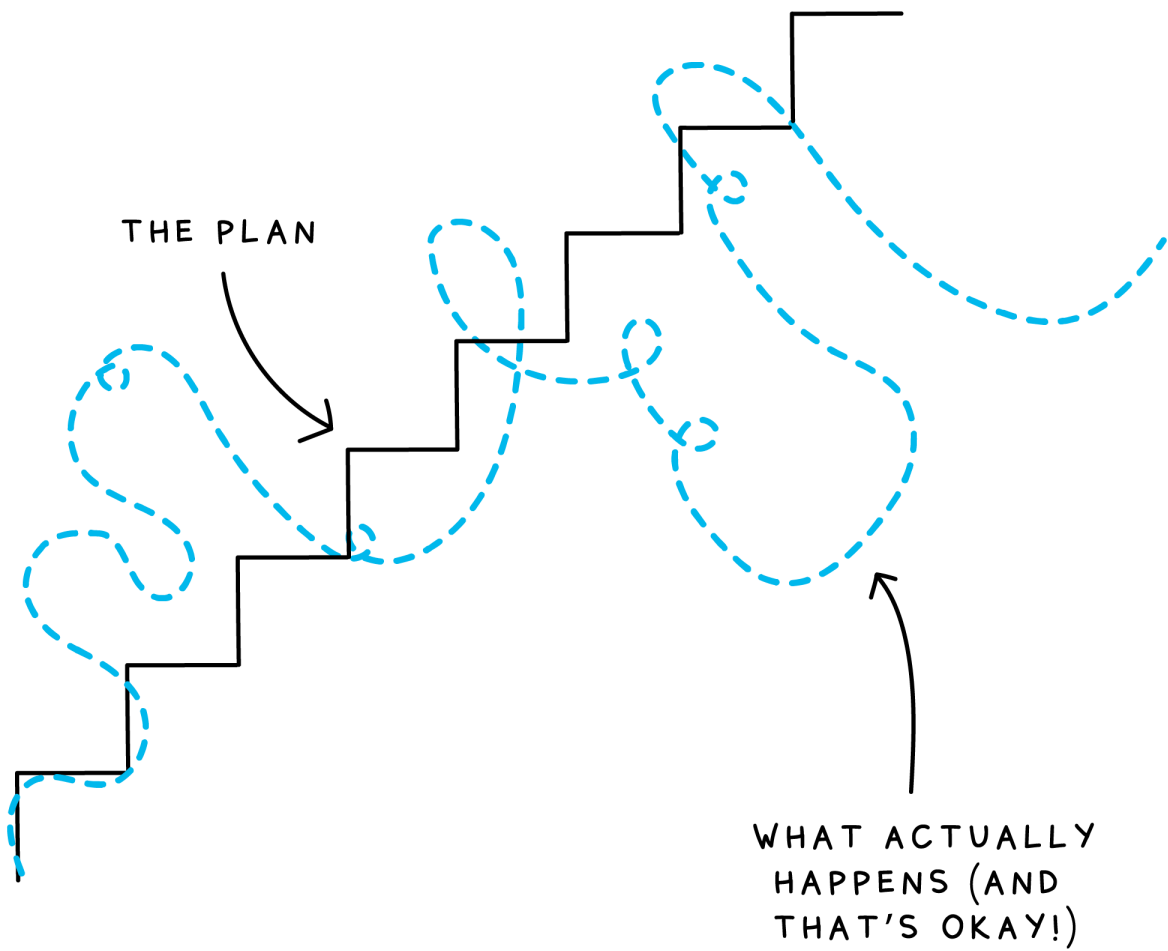
WHEN YOU FEEL
OVERWHELMED
BY THIS



TRY MAKING
ONE OF THESE



LIZ FOSSLIN



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Building the Cognitive Budget for Your Most Effective Mind

Jordan Birnbaum

We can achieve the rewards of reflection and avoid the pitfalls of rumination by having a plan to direct our energy.



The neuroscience is clear: Our brains are capable of processing only a fraction of the information available to them, and we have a **fixed amount of mental energy** at our disposal, regardless of how much we want or need in any given moment. Consequently, our brains use as little mental energy as possible whenever possible. It isn't laziness — it's fuel efficiency.

The bottom line is that there is a limit to how much thinking we can do and how much energy is available to us on any given day, so it's essential that we spend our precious mental energy deliberately and thoughtfully. We can't afford to waste it on things that serve to distract and deplete us in harmful ways.

So, what's a good approach to avoid wasting our finite energy on that which doesn't serve us? A budget, of course, to forecast resources, estimate need, and create a plan for future

decision-making. But for our minds? A "cognitive budget" is hardly a natural pairing of concepts. Our days are unpredictable, and our brains don't work like spreadsheets, so a cognitive budget will necessarily be sloppy. But creating one, and revisiting it often, allows us to enact proactive and reactive strategies that leave us happier with more effective minds.

Unconscious and Conscious Thinking

Our unconscious minds play a much larger role in our lives than many of us realize, including helping to protect us emotionally and functionally from the challenges of everyday life — from debilitatingly painful feelings to massive information overload. In his book *Thinking, Fast and Slow*, psychologist and behavioral economist Daniel Kahneman describes two types of thinking that provide a conceptual understanding of unconscious behavior. System 1 thinking is easy, fast, intuitive, and emotional. System 2 thinking is hard, slow, intentional, and logical. Compare the act of driving home from work (System 1) with driving somewhere you've never been before *without* using a GPS (System 2). One takes a lot more work than the other.

We have only so much System 2 thinking available over the course of the day, so we naturally spend as much time in System 1 thinking as possible. (Many studies indicate that **90% to 95% of our decisions are made unconsciously.**)

The problem is that our unconscious minds often keep us from thinking about what's good for us and drive us to think about what's not good for us. Because the purpose of the cognitive budget is to keep our focus on the things that serve us well, it needs to be both proactive and reactive: proactive in budgeting the limited currency of System 2 thinking, and reactive in responding to our unconscious minds, which too often lead us toward counterproductive thinking. The proactive and reactive halves of our cognitive budgets are represented by the types of thinking they seek and avoid: reflection and rumination, respectively.

Budgeting for Reflection — and Avoiding Rumination

Reflection is the hero of our story. It is the most valuable type of thinking we can do, because we get the greatest return on investment of mental energy from it. Reflective thinking gains us access to the very best of our minds, from the remarkable (our genius) to the meaningful (our compassion, empathy, forgiveness, and capacity for joy). It may be hard work, but reflection enables all the rewards that make the hard stuff in life worth it.

There are several key components of reflection, but humility is essential. Reflection is thinking without an agenda. If we lack humility, we have an agenda — to protect and enhance our self-image. But if we don't consider ourselves infallible or feel defined by any position we've taken or belief we've held — in other words, if we have humility — then we don't feel threatened by considering conflicting perspectives or reevaluating our beliefs. Humility kickstarts a virtuous cycle: By helping us articulate vulnerabilities, it enables us to go wherever our thoughts take us, even if they are uncomfortable or challenging. (Adam Grant's wonderful book *Think Again: The Power of Knowing What You Don't Know*, which examines the benefits of learning to question our opinions, is a testament to this very idea.)

Rumination, on the other hand, is the primary antagonist of the cognitive budget. Psychologist Amy Summerville describes rumination as the **thinking that provides no further “nourishment,”** metaphorically comparing it to cows' repetitive cycle of chewing, swallowing, regurgitating, and

rechewing their food. When humans ruminate, we replay events repeatedly in our minds without gleaning insights or progressing. Rumination eats up mental energy that could have otherwise been spent on something worthwhile and provides nothing but suffering. Rumination hurts us immensely, so the cognitive budget aims to help us to do less of it.

Unfortunately, most of us cannot simply stop rumination from happening — at least, not in the short term. Our unconscious minds take us there without our consent. But we can learn to identify when we are ruminating and put a stop to it. This approach lies at the heart of cognitive behavioral therapy (CBT), which posits that our beliefs about triggering events, rather than the events themselves, are the cause of most of our emotional and behavioral challenges. Changing how we think in those moments can transform our effectiveness and how we experience life.

(Important note: It is imperative that we do not use the idea of avoiding rumination as an excuse to avoid reflecting on the hard stuff. That's repression, and it is unproductive and even worse than rumination. The difference between reflecting on hard stuff and ruminating is that ruminating never leads to any new ideas, new behaviors, or a sense of resolution.)

Creating Your Work Cognitive Budget

The cognitive budget aims to help you do two specific things: proactively direct your mental energy where you do want it to go (reflection) and stop your mental energy from reactively going where you don't (rumination). Because our minds are unpredictable, the cognitive budget is less a map than a compass, incorporating elements of **positive psychology** (writing down intentions), behavioral economics (nudges), and CBT (cognitive restructuring).

Any approach that helps you to be more intentional with your mental energy is a huge win. Many people will benefit from a budget that separates work and personal concerns to make each more manageable. (This also can keep you from thinking about work when you're not working, if that's a challenge for you.) I'll focus here on the work side, but

budgeting for both areas has the potential to be immensely valuable.

The first rule of the cognitive budget is that it's yours. Whatever works for you is what's right. How you complete this table will determine the extent to which the cognitive budget is helpful to you. You'll use your reflections and ruminations sections differently, so we'll go through them separately.

There are many ways to express *intentions for reflection* for your work life. They can be specific questions, like "Why is the team struggling to collaborate?" or "Why does the team work together so well?"; in the form of general subjects, like "professional development" or "career advancement"; or as general directions, like "Figure out the product backlog" or "Improve click-through rates."

Identifying *ruminations to abort* is trickier, but they're absolutely worth articulating so that you'll recognize them more readily when they emerge. You can surface ruminations by asking some hard questions: What do you think about that makes you feel worse the longer you think about it? To what topic do you consistently return without making any progress toward a solution or a sense of resolution? What painful moments from your past do you relive repeatedly without getting anything out of it? The better you can articulate these answers, the easier it will be to recognize those thoughts when they're surfacing.

Remember that the cognitive budget is messy and contextual, so try not to get too caught up in the wording — the underlying ideas are what matter. You are reminding your future self that there are the subjects you do and do not want to spend time thinking about. Any combination of words or sentence structures that accomplish that is perfect.

Reflections at Work

What subjects for reflection will have the best results for our careers? Of course, it depends on the person doing the thinking, but the following are helpful categories when considering your work life.

- **Mission:** Identifying what you care about, increasing time

spent doing it, finding ways to do more

- **Growth:** Acquiring skills, adding value, advancing career
- **Interpersonal relationships:** Building relationships, improving dynamics, nurturing connections
- **Strategy:** Identifying problems, forecasting conditions, surfacing connections
- **Operations:** Improving efficiency, driving effectiveness, prioritizing measurement
- **Innovation:** Driving ideation, improving implementation, creating value
- **Customers:** Increasing satisfaction, supporting retention, driving engagement
- **Marketing:** Updating value proposition, iterating messaging, promoting untraditionally
- **Support:** Providing interpersonal, departmental, organizational resources

As you read this list, pay attention to what enters your mind regarding your work life and write it down. Revisit the list again tomorrow, and again in two weeks.

Let's look at two hypothetical examples. Alex is early in her career in software product management, and Sam is established in his career in marketing. For now, we'll focus just on the proactive (reflection) work column; we'll address the personal column later.

Thinking about these things more intentionally will lead Alex and Sam to insight and action, making both more effective in their careers. But you may notice that Alex and Sam are individual contributors.

What would a cognitive budget for leaders look like? Most managers already have impossibly full plates before they even get around to engaging with their people. And yet their No. 1 priority ought to be getting the most from their teams. A cognitive budget can focus their attention where it belongs — on the team first. What are your team members' needs?

What actions can you take to support them? And how are they doing right now?

Let's use Bernadette, a hypothetical manager of seven direct reports, as an example. Note that she includes all seven reports — as well as herself — in her budget.

Of course, the needs of Bernadette's team may change as often as her own. Bernadette would do well to regularly take the pulse of each team member and devote enough mental energy to ensure that she is getting the most from each person. Given that employees need to be recognized at least once a week in order to remain engaged, managers ought to check their budgets weekly and update them as needed.

Ruminations at Work

"I cannot believe I actually said that. I am *such* an idiot. There goes my career." Sound familiar? The good news is that with experience comes the knowledge that only rarely does anything come of such worries. The bad news is that knowledge doesn't prevent us from freaking out — and those freak-outs are costly. Research shows that [work-related rumination meaningfully hurts people's performance](#) in important ways, including their memory and their ability to start or finish projects.

While work-related ruminations are intensely personal, there are likely a few main sources for all of us.

- **Exclusion:** Being left out of meetings, consideration, decision-making
- **Organizational politics:** Addressing toxicity, conflict, power dynamics
- **Disappointment:** Missing out on promotions, assignments, deals
- **Disrespect:** Combating belittling, bullying, dismissing
- **Task management:** Managing deadlines, volume, status
- **Fairness:** Dealing with unfair treatment, rewards, consequences

- **Interpersonal relationships:** Navigating collaborations, lack of support, incivility
- **Insecurity:** Facing imposter syndrome, low self-efficacy

Write your ruminations out, just for you. They're not meant to be shared.

Let's revisit Alex's and Sam's budgets to look at how they define their workplace ruminations.

Addressing Rumination

We have to build off-ramps from the rumination trap, which offers no natural exits. Becoming aware of when you are engaged in destructive or unproductive thinking and then consciously shifting your focus to something productive is nothing short of life-changing — and, admittedly, a lot easier said than done. But knowledge — or, in this case, awareness — is most definitely power. With a cognitive budget, we're primed to better recognize rumination when it happens, and to do something about it.

The goal of including your unique ruminations in your budget is to prepare yourself to recognize rumination in the moment. With this awareness, you can change your focus. If using sheer willpower to redirect your thoughts isn't possible, try asking yourself CBT-based questions: What is the evidence for or against this idea? Am I taking selected examples out of context? Are my judgments based on feelings rather than facts? Leaning in to logic and broader perspectives can help abort unconsciously driven rumination. (If you find that you cannot stop your ruminations on your own, you may want to seek professional help from a cognitive behavioral therapist.)

Again, it's critical to note that the goal is *not* to ignore the subjects of your rumination. Addressing rumination means acting or finding closure. The only unacceptable outcome is continued ruminating.

For each of their ruminative statements, Alex and Sam must consider whether these are rational or irrational beliefs. Is it actually true that Sam will never get promoted, or is that an [exaggerated belief](#)? If the former, he has a decision to make:

whether that is enough reason to look for another job. If the latter, then for his own well-being, Sam needs to train his mind not to dwell in negative exaggerations — which, with [CBT techniques](#), is far more doable than it may sound.

Creating Your Personal Cognitive Budget

When it comes to creating cognitive budgets for our work lives, we can rely on some basic categories to capture most of the relevant content we're looking for. But when it comes to our personal lives, the possibilities are infinite. For some, social connections will be at the top of the list; for others, personal growth. Some will seek to confront deeply rooted emotional pain, while others will seek to maximize joy in the present. And what's true today may not be true tomorrow.

Fortunately, there is no right or wrong way to do this. Whether a topic is challenging or enjoyable, the only criterion for reflection is that it be worthy of your focus. A good place to start is, “What do you *want* to think about? What makes you happy? What do you want to improve?” A quick search on [questions for reflection](#) or a brief review of [Maslow's theory of self-actualization](#) will give you more than you need to get started.

Identifying personal ruminations is also much more difficult than work ruminations, again because the breadth of topics is so vast, including your entire past and future. The ruminations I'm currently addressing look very different from those that occupied my mind 10 years ago; the same might be true for you.

As for aborting your ruminations and getting yourself unstuck, I can promise this: The more you practice, the easier it will get. The good news is that identifying the ruminations you want to let go of is an incredible start.

Best Practices for Budgeting

So you've written out your first ever cognitive budget. Congratulations! But there's one last thing to do: Nudge yourself. Nudging is a behavioral economics practice stemming from the idea that sending yourself reminders

through multiple channels makes them harder to ignore. Here are some possible approaches.

Make your budget visible. Whether it's a business-card-sized printout taped to your keyboard, a sticky note on your desk, or an image on your screen, put your budget where it will be persistently visible to you. (If it's visible to other people, for privacy you can use generalized words, like “development” instead of “evaluate coding versus UX for future coursework.”) Out of sight can in fact mean out of mind, so keep your workplace and personal budgets anyplace you are going to see them.

Incorporate your budget into your daily routine. Get into the habit of reading your budget in full before your commute. This is prime reflecting time. (But drive carefully!) And if you're working from home, schedule a few walks around the block during which you can check your budget.

Schedule a few five-minute reflection sessions each day on your calendar. (And don't blow them off, even when you are very busy.) You can either skim your budget in the moment or be very specific on your calendar regarding what to think about and when. Separately, schedule a few alarms on your phone each day to remind you to check your budget — and don't turn them off until you are actually looking at it. Alternatively, schedule a few push reminders each day that prompt you to reflect on a workplace budget item. (Even getting a push notification with a word like “development” will help foster reflection.) For your personal reflections, time the nudges outside of work hours.

Keep your budget fresh. Finally, your budget will inevitably lose potency over time, so it is important to update it frequently. You may achieve a goal, experience new life circumstances, or simply evolve to prioritize different things. But most importantly, it is crucial to update your budget the moment it becomes stale. You can tell it's stale when the words no longer spark any thought.

There is good reason to be confident that the cognitive budget will work for you, because it combines data-validated techniques that work from positive psychology, cognitive behavioral therapy, and behavioral economics. Metaphorically speaking, when you combine whipped cream and hot fudge with ice cream, you know it's going to

taste good. May your cognitive budget serve you as well as mine has served me.

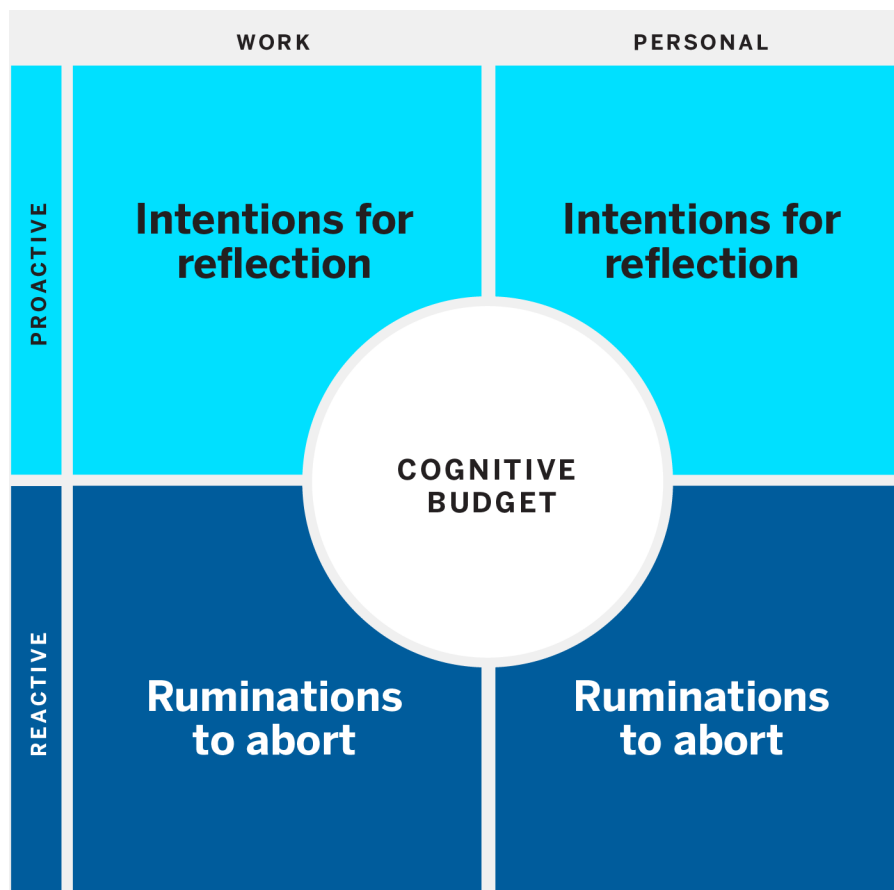
psychologist and behavioral economist whose experience spans from startups to Fortune 250 companies. He is chief operating officer at Beesy, a behavioral science-based market research agency.

About the Author

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Cognitive Budget Template

Creating a cognitive budget is a good way to be more intentional with your mental energy.



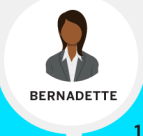
Reflections at Work

This hypothetical cognitive budget shows the proactive, or reflective, work column.

PROACTIVE	WORK  ALEX 1. New ideas to increase product usage 2. Internal networking — senior execs 3. External networking — meetups 4. New product applications 5. Expressing team appreciation 6. Coding or UX course for next steps? 7. Applying what I just learned from that webinar to my installation design
PROACTIVE	WORK  SAM 1. New brand campaign creatives 2. Stay current — tech and culture 3. Mentor individuals or groups 4. Cohesive messaging across channels 5. Leadership team check-ins 6. Simplified value proposition 7. How to get myself more public speaking opportunities

A Leader's Cognitive Budget

A hypothetical manager, Bernadette, includes herself in addition to her direct reports in her cognitive budget.

	WORK: TEAM	WORK: SELF
PROACTIVE	 Liz: Find her more creative projects Josh: Help him maintain his focus on priorities Steven: Provide regular recognition in public Steph: Hold frequent strategy touch points to help her thinking process Wendy: Provide her with new development opportunities Marc: Make frequent personal check-ins Mary: Provide intellectual stimulation through psychology articles	1. Make schedule more manageable 2. Maintain better alignment with boss 3. Think of new approaches for sales outreach 4. Figure out how to build credibility with clients 5. Brainstorm potential team operating efficiencies 6. Plan for budget needs for next year 7. Attain certifications and attend seminars for personal growth

Workplace Ruminations of Two Individual Contributors

The goal of including your unique ruminations in your cognitive budget is to prepare yourself to recognize rumination in the moment.

REACTIVE	WORK 1. I'll never get my work done on time 2. I said something stupid 3. They think I'm ineffectual 4. They always disregard my opinion 5. The culture here is toxic 6. These people are hypocrites 7. I can't get anything right	 ALEX
REACTIVE	WORK 1. I'll never get promoted 2. I'm smarter than my boss 3. Teammates don't have my back 4. Others take credit for my work 5. Business assignments are unfair 6. I'm excluded from important meetings 7. I do more than everyone else	 SAM



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