

# **Worker Well-Being: A Continuous Improvement Framework**

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#### Abstract

Cross-sectional, longitudinal, and experimental research demonstrates that subjective well-being (e.g., positive emotions, life satisfaction) relates to, precedes, and leads to employee success on numerous work-related outcomes. We extend these findings by considering how organizations might improve worker well-being. Accordingly, we propose the *Worker Well-Being Continuous Improvement Framework* with three phases: (1) an initial phase with a pretest assessment of worker well-being; (2) a test phase, where a specific positive change to improve worker well-being is implemented; and (3) a concluding phase that administers a posttest assessment to examine the effectiveness of the change. We also discuss three important considerations to address when implementing the framework: (1) measuring employee well-being, (2) building thriving work cultures, and (3) deploying positive activity interventions. Consequently, organizations can rapidly test evidence-based practices to select the most relevant and effective positive changes for their employees.

**Keywords** Well-being · Positive emotions · Life satisfaction · Work · Career · Success

"Money is not the only thing that motivates employees. It's about making them happy." – Barbara Corcoran.

Historically, the "American dream"—for both immigrants and native-born—has been entwined with yearnings for financial success. After all, it is difficult to acquire a beautiful home, two kids, a nice car, and the proverbial white picket fence without a stable career and ample income. Although attaining the American dream has gotten harder in recent decades, many still pursue it with the aim of achieving greater happi-

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ness (Chetty et al., 2017; Lyubomirsky, 2013). However, empirical research suggests it may be wiser to pursue happiness (instead of success) first.

Several previous empirical reviews (Boehm & Lyubomirsky, 2008; Walsh et al., 2018; Walsh et al., 2023) sampling hundreds of cross-sectional, longitudinal, and experimental studies have found that subjective well-being measures (e.g., positive emotions, life satisfaction) relate to, precede, and lead to greater career success on numerous outcomes. Single time point cross-sectional studies suggest that happy people tend to enjoy greater job satisfaction, superior task performance, and higher income than their less happy peers. Longitudinal work shows that people who are happy at earlier time points are more likely to be successful at later time points, including finding and keeping a job, as well as providing and receiving social support. Finally, experimental studies that randomly assign participants to condition demonstrate that inducing happiness promotes various cognitions and behaviors related to success. For example, relative to those assigned to neutral and/or negative emotion manipulations (e.g., evaluating neutral photos, recalling sad events), participants assigned to positive emotion manipulations (e.g., reading humorous comics, receiving gifts of candy) become more confident in their ability to succeed, negotiate more effectively, and produce more creative ideas. In sum, numerous studies demonstrate that well-being positively impacts workplace success.

Based on the investments companies put towards employee satisfaction, one may argue that these findings are intuitive to organizational leaders. Companies frequently offer lavish incentives (or "perks") to attract top talent and keep employees happy (Nguyen, 2015). Prior to the COVID-19 pandemic, companies like Apple, Facebook, Amazon, and Netflix provided unlimited free meals at on-campus cafes, elaborate gardens, company-sponsored concerts, doctors on-call, and bring-your-petto-work policies. However, the increasingly extravagant costs of these incentives have prompted questions about whether such programs are effective, or merely waste corporate resources (Jones et al., 2019; Nguyen, 2015). Additionally, some incentives have negative connotations. One report suggested that if a company is offering free dinners, transportation home, and nap rooms, it may be a red flag that employees work unusually long hours (Wrike, 2019). The same report identified other key factors, such as meaningful work, flexible hours, and company culture, that workers value more highly than incentives. It is also important to consider what happens during economic downturns, when incentives are either taken away or overshadowed by layoffs, such as the recent rounds that have hit Silicon Valley (Stringer, 2023). Free meals and nap rooms mean little in the absence of job security.

Given these complexities, how can employers best promote their employees' happiness? Although organizations seem to recognize the necessity of supporting employee well-being, the strategies used are often haphazard and idiosyncratic. Notably, there may be a misalignment between the problem of improving well-being—which is a temporal process best monitored over time—and the predominantly single time-point, cross-sectional methods that organizational researchers use frequently (Roe, 2014).

To help mitigate this discrepancy, as well as allow companies to better assess, test, and improve workplace well-being initiatives, we argue that organizations could (and should) focus on supporting employee's authentic happiness by implementing a con-



tinuous improvement framework, or a "test and learn" approach (Davenport, 2009; Temponi, 2005). Accordingly, in the present article we combine existing knowledge on well-being assessment, positive activities (e.g., acts of kindness, gratitude letters), and research methodology to propose a novel *Worker Well-Being Continuous Improvement Framework*. To our knowledge, we are the first to propose such a framework specifically aimed at promoting worker happiness. Our framework involves three key phases (an initial phase, a test phase, and a concluding phase), which can be modified and expanded according to organizational need. In addition, we discuss three important considerations to address when implementing the framework (how to measure employee well-being, build thriving work cultures, and deploy positive activity interventions). When properly implemented, such a framework may better facilitate the type of longitudinal assessment and continuous adaptation needed to promote long-term worker well-being.

## **Continuous Improvement Framework**

The essence of continuous improvement is best represented by the Japanese word *kaizen*, which refers to incremental improvements in ongoing processes over time (Temponi, 2005). The philosophy of continuous improvement has been described as "a company-wide process of focused and continuous incremental innovation" and "improvement initiatives that increase successes and reduce failures" (Bhuiyan & Baghel, 2005, p. 761). We argue that there are three problems common to organizational well-being interventions that continuous improvement frameworks are well-suited to address: temporality, discrimination, and adaptability. We briefly discuss each of these issues below.

### **Temporality**

First, continuous improvement frameworks account for problems with temporality of measurement identified by Roe (2014). This is particularly important because research shows that there are many aspects of well-being which vary dynamically over time. Well-being is subject to hedonic adaptation, meaning that the effects of targeted interventions (i.e., initiatives, changes) implemented in an organization may decrease over time (Fritz et al., 2017). Additionally, external organizational events can influence employee well-being, and those events themselves have varied temporal durations. A useful framework for promoting well-being should address this temporality to make sure that organizational well-being is sustained over time.

#### Discrimination

Continuous improvement frameworks may also help control for confounding variables — allowing organizations to discriminate the effects of each change. These problems have been discussed at length by Hauser et al. (2018). One limitation of many previous workplace wellness programs has been their deployment of multiple strategies simultaneously without gauging effects for each strategy separately. This



is often informally referred to as the "kitchen sink" approach because such wellness programs tend to throw "everything but the kitchen sink" at the problem. Unfortunately, such programs do not always improve intended outcomes (e.g., Jones et al., 2019). Further, implementing several positive changes at once makes it difficult (if not impossible) to determine what changes are "working" and may thus waste time, energy, and resources. Continuous improvement frameworks allow for the incremental introduction of interventions, with periods in between to assess outcomes.

#### Adaptability

By routinizing measurement and situating it in a cyclical, longitudinal process, continuous improvement frameworks also provide swift feedback that allows organizations to adaptatively "tinker" with interventions (Sanchez & Blanco, 2014; Temponi, 2005). Consequently, unsuccessful well-being interventions can be discarded, while successful interventions are phased in and out to determine when and for whom they are most effective. Additionally, successful initiatives may be slowly combined with others over time for maximal efficacy.

This adaptability makes continuous improvement frameworks especially valuable because they provide a method that allows companies to systematically winnow down the many options available to them. It also allows them to determine which options are most effective in relation to their workplace goals, employee preferences, and office culture, among other factors. Some interventions may be more (or less) effective for bigger vs. smaller companies who have older vs. younger employees, and so on. Context is critical and often produces surprises. For example, gratitude interventions improve well-being in Western, individualist cultures (e.g., U.S., U.K.), but may be ineffective or even backfire in Eastern, collectivist cultures (Shin et al., 2020). Hence, an organization based in Tokyo or Hong Kong may need a fundamentally different approach than one based in Seattle or London.

It is unlikely that a single framework can encompass all the unique factors an organization must consider when creating a well-being intervention for its employees. Is the organization a small company or a large one? Is it based in Paris or Singapore? Are the employees starting at a baseline of low, moderate, or high well-being? These are just a few of the questions that organizations may need to contemplate. Although we provide several practical resources (e.g., previously validated well-being measures, commonly administered positive activity interventions) for organizations below, outlining how and when to use each resource given each unique circumstance is beyond the scope of the present work. Regardless, our review yields numerous applied implications and provides concrete recommendations for organizations aiming to enhance worker quality of life. Continuous improvement frameworks are beneficial because they empower organizations to take an iterative, "test and learn" approach to determine quickly and systematically what works best for them.

### The Worker Well-Being Continuous Improvement Framework

Continuous improvement frameworks are well-known and often used in the psychological literature (Sanchez & Blanco, 2014). Despite this, however, they are rarely



used when attempting to study or promote employee well-being. In our review of the literature, we found that continuous improvement frameworks are typically applied at a whole-organization level to improve outcomes like productivity and workflow (Carpinetti et al., 2000; Reid, 2005; Stimec & Grima, 2019). When well-being related outcomes (e.g., stress) are studied, they are often tested as secondary outcomes of interest in reaction to the program being implemented — that is, how do workers feel as a result of the organization's attempt to continuously improve other things?

Accordingly, we propose the Worker Well-Being Continuous Improvement Framework, which aggregates existing knowledge on well-being assessment, positive activity interventions, and research methodology to directly promote employee happiness. Figure 1 introduces the basic framework patterned on existing continuous improvement frameworks. Per the model, researchers should design studies to measure and improve employee well-being that consist of a minimum of three phases: (1) the initial phase, which involves a pretest (or baseline) assessment of workers' well-being (e.g., positive affect, life satisfaction), other relevant outcomes (e.g., job satisfaction, perceived stress), and covariates (e.g., baseline well-being, socioeconomic status); (2) the test phase, where a specific positive change (e.g., work culture initiative, positive activity intervention) to improve worker well-being is implemented and tested; and (3) the concluding phase that administers a posttest assessment of all variables assessed in the initial phase to examine the effects of the positive change, while controlling for covariates. Multiple changes can be tested, or a single change can be tested and iteratively improved, by repeating the cycle, with the end-phase of one cycle becoming the beginning of the next.

When implementing the framework, there are three considerations of special note: (1) how to best measure employee well-being according to organizational needs and constraints, (2) how to use the framework to build thriving work cultures, and (3)

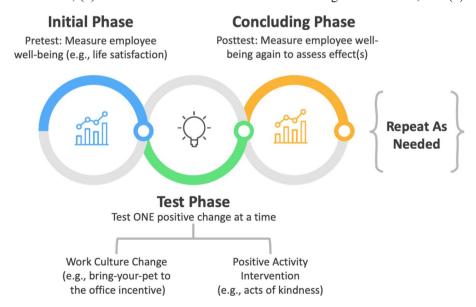


Fig. 1 Worker Well-Being Continuous Improvement Framework

how to use the framework to deploy positive activity interventions, which may help address specific organizational problems. Each component is discussed in greater detail below.

## **Measuring Employee Well-Being**

The first main component of the framework in both the initial and concluding phases involves developing proper assessments. In the words of management guru Peter Drucker, "what gets measured gets managed." Accordingly, an organization cannot effectively manage employee well-being without measuring it. One of the first concerns should be how to establish a reliable measurement protocol. Ideally, effective assessments should be regular, anonymous, and administer strategically selected variables. We consider each of these applied measurement recommendations below.

### **Regular Assessment**

Our continuous improvement framework will work best with a routine architecture of assessment in place. It allows organizations to extend the three-part process of our framework (measure, intervene, measure) into a longer chain to test as many assessment time points (or waves) as needed (measure, intervene, measure, intervene, etc.). Unfortunately, many organizational longitudinal studies are brief and consist of only a few waves (e.g., Wayne et al., 2022)—possibly because large-scale, multi-wave surveys using complex designs can be resource intensive (Mari & Meglio, 2013). Consequently, such designs may be more feasible for larger organizations.

However, our basic framework can be readily adapted to a broad range of methods and budgets. Smaller organizations (with 30 to 100 employees) may adopt leaner assessment methods at intervals that are as regular as possible without becoming overly taxing. Quick monthly, quarterly, or even annual surveys with only a few items may reduce employee measurement fatigue while still allowing small companies to track employee well-being longitudinally. Additionally, instead of designing interventions, small organizations (or even large ones, should they choose this method) could simply monitor well-being in response to naturalistic organizational changes. If using this approach, we recommend that organizations do their best to "bookend" data collection efforts—that is, deliberately add a beginning and ending phase before and after a particular change to assess relevant outcomes and covariates.

### **Anonymity**

Notably, measurement initiatives for any company may entail collecting sensitive, personal employee data—for example, asking employees to admit that they have been depressed lately. In the interest of both ethical considerations and obtaining trustworthy data, companies should collect anonymous survey data and link longitudinal assessments with unique, randomly generated respondent IDs. Notably, research suggests that when survey respondents feel less anonymous, their responses become more positive, less honest, more socially desirable, and/or of lower quality



(Bowling, 2005; Saari & Scherbaum, 2011). While such responses may make leaders feel better, they likely do not represent an accurate snapshot. Other best practices include assuring employees that their responses will remain completely confidential (and will not be shared with supervisors or co-workers), they may skip any questions they do not wish to answer, and all reports utilizing the data will present only aggregate statistics and not individual information. Ensuring employees actually believe these statements will also be important. Hiring a consulting company or external well-being and/or survey vendor to collect, manage, summarize, and analyze survey data may help.

#### **Strategic Variable Selection**

### **General vs. Domain Specific**

Researchers have developed numerous scales to assess employee well-being (e.g., Bartels et al., 2019; Zheng et al., 2015). However, companies need to be precise about what they are measuring. Ideally, surveys administered to employees should not confound general psychological well-being (e.g., "I feel happy") with domain-specific (e.g., "I feel happy at work") or even job satisfaction (e.g., "I am satisfied with my job"). Notably, most of the cross-sectional, longitudinal, and experimental research linking happiness to success focuses on general well-being measures (e.g., positive affect, life satisfaction). However, if time, personpower, and resources allow, we recommend assessing both general and domain-specific measures, as they tend to be correlated with each other (Bowling et al., 2010).

### Positive vs. Negative Measures

Organizations should also consider whether to assess positive measures, negative measures, or a combination of both. Again, if resources allow, we recommend assessing both. Positive measures reflect the presence of positive emotions (e.g., joy, contentment), positive qualities (e.g., belonging, self-esteem), and/or favorable evaluations (e.g., life satisfaction). Negative measures reflect the presence of negative emotions (e.g., sadness, anger), negative qualities (e.g., stress, loneliness), and/or unfavorable evaluations (e.g., depression). For example, while some people may assume that positive and negative emotions are simply opposites of each other on one continuous spectrum, research shows they are actually independent and negatively correlated (Diener & Emmons, 1984). Assessing both positive and negative measures will allow for maximal predictive power, as well as the assessment of non-standard cases (i.e. cases where positivity and negativity are both high, or both low), which may be differentially related to organizational outcomes (e.g., see Rogge et al., 2017 for an example in relationship literature).

#### Other Related Outcomes

Finally, other well-being-related (e.g., flow, mindfulness) and job-related (e.g., job satisfaction, organizational commitment) outcomes may be useful to assess.



For example, people who frequently experience positive psychological states such as flow (complete absorption in a task where personal skills meet required challenges) and mindfulness (maintaining conscious focus and awareness on the present moment) typically experience greater well-being (Brown & Ryan, 2003; Csikszentmihalyi, 1990; Jackson & Marsh, 1996). Additionally, as noted previously, a wealth of previous studies show that well-being predicts success on a host of job-related outcomes, including job satisfaction, performance, promotion, income, etc. (Boehm & Lyubomirsky, 2008; Walsh et al., 2018; Walsh et al., in press). Thus, organizations may want to gauge to what extent increased employee well-being results in better job-related outcomes. To get organizations and researchers started, we have provided some commonly used measures to consider in Table 1.

## **Building Thriving Work Cultures**

The test phase of our continuous improvement framework involves implementing a specific positive change. The first type of positive change we consider involves building thriving work cultures. There are innumerable culture changes an organization could undertake. However, in the interests of providing guidance, we focus on specific applied strategies backed by previous theory and research, including valuing employees, self-determination theory, psychological safety, work-life balance, and effective incentives.

### **Valuing Employees**

According to an analysis of *Fortune's* "100 Best Companies to Work For" lists, top organizations all highly value (and care about) their employees (Hinkin & Tracey, 2010). Worker development and retention are also viewed as critical to company success. Other successful practices among top *Fortune* companies include flexible scheduling, innovative methods to build a loyal and competent workforce, career training development programs, performance management systems aligned with organizational objectives, and compensation programs linking pay to performance.

One study examining a sample of 3,446 firms from 43 countries from 2003 to 2014 found that "employee-friendly" companies (i.e., firms that treated their employees well by providing high-quality job conditions, safe and healthy work environments, career training and development programs, and greater diversity and equity) had a higher market valuation and performed better (Fauver et al., 2018). The researchers concluded that employee friendly cultures add value to organizations by enhancing employee motivation and improving overall efficiency (i.e., higher sales-to-assets and lower costs), and profitability (e.g., return on assets). Firms with stronger employee friendly cultures even performed better and were valued higher before, during, and after the 2008 global financial crisis.



Table 1	Sample	Measures
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Scale	Reference	Construct(s)	Example Item
Affect Adjective Scale/ Brief Emotion Report	Diener and Emmons (1984)	Negative emotions and Positive emotions	How often have you felt this way? Happy. Depressed/Blue.
Balanced Measure of Psychological Needs	Sheldon and Hilpert (2012)	Need satisfac- tion (Autonomy, Competence, and Relatedness)	My choices expressed my "true self."
Center for Epidemiological Studies Depression Scale	Radloff (1977)	Depression	I felt depressed.
Comprehensive Inventory of Thriving	Su et al. (2014)	Accomplishment, Engagement, Life satisfaction, Mean- ing, Optimism, Support, etc.	I am optimistic about my future.
Flow State Scale	Jackson and Marsh (1996)	Flow	While working My attention was focused entirely on what I was doing.
Global Mood and Life Satisfaction Sliders	Jacobs Bao (2012)	Mood and Life satisfaction	How happy do you feel these days?
Gratitude Questionnaire Six Item	McCullough et al. (2001)	Gratitude	I am grateful to a wide variety of people currently in my life.
Mindfulness Attention Awareness Scale	Brown and Ryan (2003)	Mindfulness	I found myself doing things without paying attention.
Generic Job Satisfaction Scale	Macdonald and MacIntyre (1997)	Job satisfaction	I feel good about my job.
Perceived Stress Scale	Cohen et al. (1983)	Stress	How often have you felt nervous and "stressed"?
Personal Wellbeing Index	Tomyn et al. (2013)	Domain satisfaction	Rate your level of satisfaction with each domain Your standard of living.
Revised UCLA Loneliness Scale	Russell et al. (1980)	Loneliness	I feel isolated from others.
Rosenberg Self-Esteem Scale	Rosenberg (1965)	Self-esteem	I take a positive attitude toward myself.
Satisfaction With Life Scale	Diener et al. (1985)	Life satisfaction	In most ways my life is close to my ideal.
Subjective Happiness Scale	Lyubomirsky and Lepper (1999)	Happiness	In general, I consider myself Not a very happy person to A very happy person.

Note. Non-comprehensive list of potential well-being and related measures that organizations could assess.

## **Self-Determination and Psychological Safety**

Organizations may also improve their work culture by drawing on fundamental psychological theories. To achieve optimal human functioning, self-determination theory proposes that humans ought to satisfy three basic psychological needs: autonomy (feelings of personal choice and self-ownership), competence (feelings of mastery and accomplishment), and relatedness (feelings of closeness and connectedness with others; Ryan and Deci, 2000; Sheldon et al., 2001). Research supports this theory in



workplace contexts. For example, in one study focusing on a major office machine company, managers who supported their employees' autonomy, competence, and relatedness had employees who trusted the company more and were more satisfied with their jobs (Deci et al., 1989). Hence, organizations could test giving employees greater autonomy to accomplish work tasks or finding ways to facilitate positive social relationships among coworkers.

Increasing "psychological safety" could be another potential positive change that organizations test. Psychological safety involves feelings of interpersonal trust and mutual respect among teammates, who are not worried about being embarrassed, rejected, or punished for speaking up and sharing their ideas (Edmondson, 1999). In 2012, as part of an initiative code named Project Aristotle, Google studied 180 teams to determine what prompted some teams to succeed while others stumbled (Duhigg, 2019). Psychological safety emerged as one of the most important team norms facilitating success, and subsequent work indicated some key strategies to foster it. For example, teams with higher levels of psychological safety tended to have members who spoke in similar proportions (rather than having one or two people dominating the conversation); such teams also had members who demonstrated social sensitivity towards their colleagues (e.g., noticing when someone was upset). Creating an environment in which employees feel secure enough to disclose potentially sensitive personal information (e.g., a cancer diagnosis) also contributes to greater psychological safety within teams.

Psychological theory may be especially important to consider as companies grapple with the workplace ramifications of the COVID-19 pandemic. For example, one study in Singapore examining how employees adapted to workplace changes during the COVID-19 pandemic found that employees were happier when they could exercise autonomy in their tasks and roles, while employees without autonomy (especially those who felt micro-managed) had higher anxiety and frustration (Lee, 2021). Another study surveying the employees of a commercial real estate company about post-COVID-19 workspace preferences found two different groups, with one group preferring to work at home regardless of workload and the other group preferring to go into the office on days when they had low to average workloads (Appel-Meulenbrock et al., 2022). This difference in workspace preferences illustrates an opportunity for companies to consider their employees' preferences (thus enhancing their sense of autonomy) when optimizing the workplace environment. Finally, a study looking at work location and well-being during the first lockdown found that when employee's preferences were not aligned with their location (e.g., desiring to return to the office but being required to work from home), they experienced deceased wellbeing (Lund et al., 2022).

#### **Work-Life Balance**

Companies could also consider how to improve employees' workload, stress levels, and work-life balance. Positive changes aimed at reducing overtime (e.g., limiting work to 40 h per week) may be especially effective. With the rise of information communication technology that connects employees to work 24/7 and "always-on" work culture (McDowall & Kinman, 2017), employee stress levels have risen nearly



20% in the past three decades (Lipman, 2019). Higher work stress can undermine productivity and negatively impact well-being (Donald et al., 2005).

Consequently, companies pressuring their employees to work longer hours may be courting backfiring effects via reduced productivity. A re-analysis of World War I data (collected 1915–1916) examined the output (e.g., numbers of shells produced) of British ammunitions and explosives workers (Pencavel, 2015). During that time-frame, the work week was often extended up to 70–100 h per week to supply the war effort. The results concluded that weekly output tended to be proportional to weekly hours worked up until about 48 h per week, at which point marginal productivity declined. Furthermore, weeks without a day of rest (e.g., working on Sunday) had about 10% lower output the following week, relative to weeks when there was no work on Sunday.

Long work hours are also associated with lower levels of work-life balance, especially for women (Albertsen et al., 2008). A study of 1,416 employees from Malaysia, China, New Zealand Spain, France, and Italy found that greater work-life balance (e.g., "I manage to balance the demands of my work and personal/family life well") was linked with greater job satisfaction and life satisfaction, as well as less anxiety and depression (Haar et al., 2014).

Organizations may also better manage employee stress and work-life balance needs by hiring an external vendor with business-specific well-being solutions. For example, a sample of 2,851 members of a life coaching company who received evidence-based leadership coaching, well-being assessments, and experiential learning resources for at least 90 days reported significant mean increases in resilience (8.57%) and stress reduction (17.67%; Black et al., 2019).

#### Effective Incentives

Finally, organizations could test incentives supported by empirical evidence as another way of improving their overall work culture. For example, music concert attendance (such as with company-sponsored concerts) boosts well-being for both young and old individuals and may foster connection among employees (Packer & Ballantyne, 2011; Shibazaki & Marshall, 2017). Additionally, the presence of a dog in a pet-friendly office can increase social interactions among employees (Foreman et al., 2017). There is also evidence that supplying green spaces and natural elements (e.g., a tree-lined park) in and around the office can improve employees' positive affect, life satisfaction, and job satisfaction, as well as reduce stress (Berman et al., 2008; Markwell & Gladwin, 2020; Sop Shin, 2007).

In sum, there are numerous culture initiatives that companies can test to cultivate happier employees. These include, but are not limited to, providing the right kind of incentives, such as allowing flexible hours; creating a strong culture of caring; valuing employees; providing career training development programs; linking pay to performance; being "employee friendly"; respecting work-life balance and maintaining reasonable working hours; supporting the psychological needs of autonomy, competence, and relatedness; and fostering psychological safety among teams. Although this is a long list, even small steps taken towards these aims may pay corporate dividends.



## **Deploying Positive Activity Interventions**

The second type of positive change that organizations may consider in our framework's test phase is deploying positive activity interventions (PAIs; aka positive activities or positive psychology interventions; Sin and Lyubomirsky, 2009). PAIs are composed of simple self-administered cognitive behavioral strategies that are designed to improve the well-being of the people performing them (Layous & Lyubomirsky, 2014). Such strategies usually involve mimicking the thoughts and behaviors of naturally happy people.

Notably, this approach is different from merely pressuring employees to act happy (e.g., smile, be cheerful), which can backfire — ironically prompting employees to feel more emotional exhaustion and burnout (Brotheridge & Grandey, 2002; Grandey, 2003). Thousands of randomized controlled trials have validated the effectiveness of PAIs for improving subjective well-being (e.g., life satisfaction) and/or reducing negative symptoms (e.g., depression; Bolier et al., 2013; Carr et al., 2023; Sin and Lyubomirsky, 2009). For example, after 8 weeks of use, 1,053 participants randomly assigned to use a PAI-deploying science-based smartphone app (Happify) reported fewer depressive and anxiety symptoms, as well as greater resilience, than those assigned to a control group (Parks et al., 2018). Additionally, PAIs can be quickly and easily administered; they are accessible, low-cost, and carry no stigma or side effects.

Numerous PAIs have been studied empirically, with more published each month. Many have been tested in workplace environments. For example, one study examined the effects of a group-level acts of kindness intervention with employees in a Spanish corporate workplace, Coca-Cola Iberia in Madrid (Chancellor et al., 2018). Employees were randomly assigned to one of three groups: (1) givers, who performed kind acts (e.g., getting a cup of coffee for a co-worker), (2) receivers, who received kind acts, or (3) controls, who observed kind acts being exchanged between givers and receivers. Relative to controls, both givers and receivers benefited from the monthlong intervention via increases in competence and autonomy. At a follow-up assessment 1 month later, givers reported greater life satisfaction and job satisfaction, as well as decreases in depression; receivers reported improved subjective happiness. Receivers also paid it forward with 278% more kind acts than controls. This intervention demonstrated that kind acts performed at the office can be both emotionally rewarding and socially contagious.

Table 2 presents a non-comprehensive list of 14 commonly used and well-validated PAIs that could be tested using the *Worker Well-Being Continuous Improvement Framework*. For each PAI, we include example instructions, study references, and outcomes impacted (e.g., positive emotions, job satisfaction, stress). To briefly summarize here, these PAIs include acting extraverted (i.e., talkative, assertive, and spontaneous; Margolis and Lyubomirsky, 2019); doing acts of kindness for others (e.g., buying coffee for a friend; Chancellor et al., 2018; Nelson et al., 2016); seeking out awe-inducing experiences (e.g., viewing giant sequoias; Sturm et al., 2022); cultivating optimism by envisioning one's best possible self (King, 2001); engaging in flow activities (e.g., playing Pokémon GO; Rankin et al., 2019); actively forgiving others (McCullough & Witvliet, 2002); writing a letter of gratitude to a benefactor (Seligman et al., 2005); counting (or listing) gratitude-inducing blessings (e.g., a beautiful



Table 2 Examp	le Positive Activity Interventions		
PAI	Example Instructions	References	Outcomes
Act Extraverted	During the next week, act as talkative, assertive, and spontaneous as you can. Please list 5 specific ideas for how and when you will incorporate these types of behaviors into your daily life. For example, "When my friends are discussing something important to me, I will express my opinion."	Jacques- Hamilton et al. (2019); Margolis and Lyubomirsky (2019)	Authenticity (+); Autonomy (+); Connectedness (+); Competence (+); Extraversion (+); Happiness (+); Flow (+); Life satisfaction (+); Negative emotions (-); Positive emotions (+)
Acts of Kindness	In our daily lives, we often perform acts of kindness—both large and small—for others, though it can sometimes be difficult to find time to do so. Please make time to do three nice things for other people. These acts of kindness can be small (leave an encouraging note for a co-worker) or big (helping a friend move) and should directly benefit specific individuals, like family members, friends, or even strangers. These acts of kindness should involve a little extra effort and be outside of your normal routine.	Anik et al. (2013); Chancellor et al. (2018); Nelson et al. (2016); Nelson-Coffey et al. (2017)	Flourishing (+); Happiness (+); Health (+); Job satisfaction (+); Peer acceptance (+)
Awe Walk	Take at least one (~15 min) walk per week. Seek the experience or feeling of awe. Awe is most likely to occur in places that have physical vastness and novelty. These could include natural settings, like a hiking trail lined with tall trees, or urban settings, like at the top of a skyscraper. Keep a fairly light to moderate pace and walk alone without interruption from your smartphone.	Piff et al. (2015); Sturm et al. (2022)	Awe (+); Ethical Decision- Making (+); Gen- erosity (+); Prosocial behavior (+); Smile intensity (+)

Table 2 (continued)

PAI	Example Instructions	References	Outcomes
Best Possible Self	Think about your life in the future. Imagine that everything has gone as well as it possibly could. You have worked hard and succeeded at accomplishing all your life goals. Think of this as the realization of all your life dreams. Now, write about what you imagined.	King (2001); Sheldon and Lyubomirsky (2006)	Motivation (+); Negative mood (-); Optimism (+); Positive emotions (+); Positive mood (+); Responsibility to others (+); Responsibility to self (+)
Flow Activities	Please note the following quote: "My mind isn't wandering. I am not thinking of something else. I am totally involved in what I am doing. My body feels good. I don't seem to hear anything. The world seems to be cut off from me. I am less aware of myself and problems." Please list three activities you engage in that create the feeling just described. Choose one of those activities to do this week. Examples flow activities include reading, exercising, and playing video games.	Csikszentmi- halyi (1990); Rankin et al. (2019)	Flow state (+); Negative emotions (-); Positive emotions (+); Worry (-)
Forgiveness	REACH Forgiveness model: Recall the hurt; Empathize to emotionally replace negative states (e.g., bitterness) with positive ones (e.g., compassion); Altruistically give the gift of forgiveness; Commit to forgiveness (e.g., write a letter); Hold onto forgiveness.	McCullough and Witv- liet (2002); Worthington et al. (2010)	Anger (-); Anxiety (-); De- pression (-); Hope (+); Self- esteem (+)



Table 2 (continued)

PAI	Example Instructions	References	Outcomes
Gratitude Letter	There are many people in our lives that we might be grateful to. Please take a moment to think back over the past several years of your life and remember an instance when someone did a kind act (or acts) for you for which you are extremely grateful. Think of the people – parents, children, spouses/partners, relatives, friends, neighbors, teachers, employers, and so on – who have been especially generous and thoughtful towards you. Now, write a letter to one of these individuals.	Davis et al. (2015); Regan et al. (2022); Seligman et al. (2005); Walsh et al. (2022)	Connect- edness (+); Gratitude (+); Happiness (+); Life Satisfaction (+); Loneliness (-); Negative emotions (-); Positive emotions (+); Self-improvement motivation (+); Social relation- ships (+); Social support (+)
Gratitude List	There are many things in our lives, both large and small, that we might be grateful about. Think back over the past week and write down up to five things in your life that you are grateful or thankful for.	Chancellor et al. (2015); Davis et al. (2015); Emmons and McCullough (2003)	Gratitude (+); Health (+); Life satisfac- tion (+); Positive emotions (+)
Loving- Kindness Meditation	Do a 10-minute loving-kindness meditation: https://www.youtube.com/watch?v=1eLKEuJkggw	Fredrickson et al. (2008)	Negative emo- tions (-); Positive emotions (+)

Table 2 (continued)

PAI	Example Instructions	References	Outcomes
Mindfulness Meditation	Do a 5-minute body scan meditation: http://marc.ucla.edu/mpeg/Body-Scan-Meditation.mp3	Carmody and Baer (2008); Eberth and Sedlmeier (2012); Wil- liams and Kabat-Zinn (2011)	Anxiety (-); Attention (+); Depression (-); Emotion regulation (+); Mindfulness (+); Negative emotions (-); Neuroticism (-); Positive emotions (+); Psychological well-being (+); Stress (-)
Savoring	Think about where you live right now. Consider all the reasons that you like this area – special people, specific restaurants, places that are remarkably beautiful. Now, imagine that you will be moving far away in 30 days. During this month, do all the things you are going to miss while you're away. For example, get in touch with friends who are special to you and spend time in the spots that have made your current location feel like home to you. Seize the moment and take the time to enjoy what you love most about where you live, work, and study.	Bryant and Veroff (2017); Layous et al. (2018); Quoidbach et al. (2010)	Autonomy (+); Connectedness (+); Competence (+); Depression (-); Life satisfaction (+); Negative emotions (-); Positive emotions (+)



Table 2 (continued)

PAI	Example Instructions	References	Outcomes
Self-compas- sion Letter	Write a self-compassionate letter about an issue you tend to feel bad about. Write the letter from the perspective of an imaginary friend who is unconditionally kind, accepting, and compassionate, and read it twice during the upcoming week.	Ferrari et al. (2019); Smeets et al. (2014)	Anxiety (-); Connectedness (+); Depression (-); Life satisfaction (+); Mindfulness (+); Optimism (+); Self-compassion (+); Self-criticism (-); Self-efficacy (+); Stress (-); Rumination (-); Worry (-)
Signature Strengths	Take the VIA Signature Strengths Questionnaire by visiting https://www.viacharacter.org/survey/account/register. After completing the survey, pick one of your top five signature strengths and use it in a new and different way every day for one week.	Peterson (2006); Ruch et al. (2020); Seligman et al. (2005)	Depression (-); Engagement at work (+); Flourishing (+); Job satisfaction (+); Happiness (+); Meaning at work (+); Positive experiences (+)
Talk to Strangers	Please have a conversation with a new person today. Try to make a connection. Find out something interesting about him or her and tell them something about you. The longer the conversation, the better.	Epley and Schroeder (2014); Reece et al. (2022)	Positive emotions (+); Positive experiences (+)

Note. "+" indicates an outcome that is increased by the PAI, while "-" indicates an outcome that is decreased.

sunset; Emmons and McCullough, 2003); doing a loving-kindness or mindfulness mediation (Carmody & Baer, 2008; Fredrickson et al., 2008); savoring positive experiences (Layous et al., 2018); practicing self-compassion (Neff, 2011); identifying and using signature strengths (Seligman et al., 2005); and talking to strangers (Epley



& Schroeder, 2014). An even larger database that includes 92 PAI instructions is hosted by the Greater Good Science Center at https://ggia.berkeley.edu/.

The empirical literature exploring PAIs within organizational contexts is in its early stages and continuously expanding. At present, there may not be sufficient evidence to recommend specific PAIs for addressing specific organizational issues, such as high attrition rates or low employee morale. Nevertheless, we have seen some interventions, like gratitude lists, being increasingly adopted in organizational settings, while others like acting extraverted are still nascent and largely untested in these contexts (Bono et al., 2012; Chancellor et al., 2015; Margolis & Lyubomirsky, 2019). Despite this, Table 2 provides a guide on the outcomes affected by different PAIs with the aim of helping organizations decide which interventions to test for particular issues. For instance, if the challenge is low employee happiness, interventions known to foster positive emotions (e.g., acting extraverted, writing gratitude letters) could be considered. Alternatively, if employees are grappling with high stress levels, interventions that reduce stress (e.g., mindfulness meditation, self-compassion letters) may be beneficial.

## Strengths, Limitations, and Future Directions

The current review offers a comprehensive exploration of worker well-being and provides a robust framework for implementing positive changes in the workplace. Its strengths lie in the synthesis of a wide range of research on worker well-being and the applied recommendations for enhancing workplace practices. The proposed framework, encompassing well-being measurement, building thriving work cultures, and deploying positive activity interventions, is grounded in empirical research and offers a clear roadmap for organizations seeking to improve employee quality of life.

However, there are several limitations that should be acknowledged. First, although the review provides a broad overview of strategies for improving worker well-being, it does not include direct tests of the models within the framework. Consequently, the effectiveness of the proposed strategies in specific organizational contexts remains an open question. Future research could address this limitation by conducting empirical studies to test the proposed framework in a variety of organizational settings. Examining relevant moderators that alter the magnitude of well-being effects in organizational settings would be especially useful.

Second, one primary focus includes individual-level interventions, such as PAIs. Although several meta-analyses suggest that these interventions improve individual well-being (e.g., Bolier et al., 2013; Carr et al., 2023; Sin and Lyubomirsky, 2009), a recent critique highlighted that most PAI studies are underpowered and lack pre-registered hypotheses (Folk & Dunn, 2023). Historically, researchers have used meta-analysis to integrate a large number of small studies to more accurately gauge effect sizes, but some scholars have recently argued that such an approach may amplify false positives (Simonsohn et al., 2022). Additionally, the impact of PAIs on organizational-level outcomes, such as team performance or organizational culture, is less clear. A great deal more research is needed to explore the effects of these interven-



tions at the organizational level — ideally, with studies that are well-powered and pre-registered.

Lastly, our review assumes that organizations have the resources and motivation to implement the types of changes we describe. In practice, organizations may face various barriers to executing the proposed changes, such as lack of resources, resistance from employees, or poor fit with organizational culture. Future research could explore strategies for overcoming these barriers and facilitating the implementation of positive changes in the workplace.

### **Conclusion**

Cross-sectional, longitudinal, and experimental evidence demonstrates that wellbeing is associated with, precedes, and produces success on a host of work outcomes. In other words, individuals who are happy in their lives and with their lives are more likely to be successful at their jobs—both presently and in the future—and their happiness may even cause their career success. Organizations may benefit from this happiness advantage by actively improving their employees' well-being. We have proposed implementing a continuous improvement framework with three phases (initial, test, and concluding) that will allow companies to incrementally test and assess specific positive changes over time. The initial and concluding phases involve carefully and effectively measuring employee well-being. The test phase involves exploring two different types of positive changes: building thriving work cultures and/or deploying positive activity interventions. Strategies for building thriving work cultures include genuinely caring for employees, allowing flexible work hours, and supporting need satisfaction and psychological safety, among others. We provide 14 PAIs (e.g., practicing acts of kindness, writing gratitude letters) that can improve employee well-being (e.g., life satisfaction), work-related outcomes (e.g., job satisfaction), and quality of life (e.g., stress). The continuous improvement framework could be used to determine which of these factors (and which combinations) are most effective for a given organization and its employees. We hope that this framework coupled with some suggested concrete strategies will allow researchers and companies to better support worker well-being. Ultimately, we believe such initiatives could move companies to realize their organizational goals, enhance their bottom lines, and make both employees and shareholders happy.

#### References

Albertsen, K. P., Rafnsdóttir, G. L. P., Grimsmo, A. M. A., Tómasson, K. M. D., & Kauppinen, K. P. (2008). Workhours and worklife balance. Scandinavian Journal of Work Environment & Health, 14–21.

Anik, L., Aknin, L. B., Norton, M. I., Dunn, E. W., & Quoidbach, J. (2013). Prosocial bonuses increase employee satisfaction and team performance. *Plos One*, 8(9), e75509. https://doi.org/10.1371/journal.pone.0075509.



- Appel-Meulenbroek, R., Kemperman, A., van de Water, A., Weijs-Perrée, M., & Verhaegh, J. (2022). How to attract employees back to the office? A stated choice study on hybrid working preferences. *Journal of Environmental Psychology*, 81, 101784. https://doi.org/10.1016/j.jenvp.2022.101784.
- Bartels, A. L., Peterson, S. J., & Reina, C. S. (2019). Understanding well-being at work: Development and validation of the eudaimonic workplace well-being scale. *Plos One*, 14(4), e0215957. https://doi.org/10.1371/journal.pone.0215957.
- Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science*, 19(12), 1207–1212. https://doi.org/10.1111/j.1467-9280.2008.02225.x.
- Bhuiyan, N., & Baghel, A. (2005). An overview of continuous improvement: From the past to the present. *Management Decision*, 43(5), 761–771. https://doi.org/10.1108/00251740510597761.
- Black, H., Greenberg, S., Saulsgiver, K., Sinar, E., Reece, A., Carr, E., & Kellerman, G. (2019). Beyond hedonia: 5 keys to enhancing workplace well-being at scale. *American Journal of Health Promotion*, 33(8), 1212–1217. https://doi.org/10.1177/0890117119878277c.
- Boehm, J. K., & Lyubomirsky, S. (2008). Does happiness promote career success? *Journal of Career Assessment*, 16(1), 101–116. https://doi.org/10.1177/1069072707308140.
- Bolier, L., Haverman, M., Westerhof, G. J. G. J., Riper, H., Smit, F., Bohlmeijer, E. E. T., Rupke, S. J., Blecke, D., Renfrow, M., Dobson, K. S., Cuijpers, P., Straten, A., Warmerdam, L., Cuijpers, P., Geraedts, A. S., Oppen, P., Andersson, G., Markowitz, J. C., Straten, A. v.,, & Altman, D. G. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *Bmc Public Health*, 13(1), 119–119. https://doi.org/10.1186/1471-2458-13-119.
- Bono, J. E., Glomb, T. M., Shen, W., Kim, E., & Koch, A. J. (2012). Building positive resources: Effects of positive events and positive reflection on work stress and health. *Academy of Management Journal*, 56(6), 1601–1627. https://doi.org/10.5465/amj.2011.0272.
- Bowling, A. (2005). Mode of questionnaire administration can have serious effects on data quality. *Journal of Public Health*, 27(3), 281–291. https://doi.org/10.1093/pubmed/fdi031.
- Bowling, N. A., Eschleman, K. J., & Wang, Q. (2010). A meta-analytic examination of the relationship between job satisfaction and subjective well-being. *Journal of Occupational and Organizational Psychology*, 83(4), 915–934. https://doi.org/10.1348/096317909X478557.
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of people work. *Journal of Vocational Behavior*, 60(1), 17–39. https://doi.org/10.1006/jvbe.2001.1815.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. https://doi.org/10.1037/0022-3514.84.4.822.
- Bryant, F. B., & Veroff, J. (2017). Savoring: A new model of positive experience. Psychology Press.
- Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine*, 31(1), 23–33. https://doi.org/10.1007/s10865-007-9130-7.
- Carpinetti, L. C. R., Gerólamo, M. C., & Dorta, M. (2000). A conceptual framework for deployment of strategy-related continuous improvements. *The TQM Magazine*, 12(5), 340–349. https://doi.org/10.1108/09544780010341950.
- Carr, A., Finneran, L., Boyd, C., Shirey, C., Canning, C., Stafford, O., Lyons, J., Cullen, K., Prendergast, C., Corbett, C., Drumm, C., & Burke, T. (2023). The evidence-base for positive psychology interventions: A mega-analysis of meta-analyses. *The Journal of Positive Psychology*, 1–15. https://doi.org/10.1080/17439760.2023.2168564.
- Chancellor, J., Layous, K., & Lyubomirsky, S. (2015). Recalling positive events at work makes employees feel happier, move more, but interact less: A 6-week randomized controlled intervention at a japanese workplace. *Journal of Happiness Studies*, 16(4), 871–887. https://doi.org/10.1007/s10902-014-9538-z.
- Chancellor, J., Margolis, S., Bao, J., K., & Lyubomirsky, S. (2018). Everyday prosociality in the work-place: The reinforcing benefits of giving, getting, and glimpsing. *Emotion*, *18*, 507–517. https://doi.org/10.1037/emo0000321.
- Chetty, R., Grusky, D., Hell, M., Hendren, N., Manduca, R., & Narang, J. (2017). The fading american dream: Trends in absolute income mobility since 1940. *Science*, 356(6336), 398–406. https://doi.org/10.1126/science.aal4617.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396. https://doi.org/10.2307/2136404.
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper & Row.



- Davenport, T. H. (2009). How to design smart business experiments. Harvard Business Review. https://hbr.org/2009/02/how-to-design-smart-business-experiments.
- Davis, D. E., Choe, E., Meyers, J., Wade, N., Varjas, K., Gifford, A., Quinn, A., Hook, J. N., Van Tongeren, D. R., Griffin, B. J., & Worthington, E. L. Jr. (2015). Thankful for the little things: A meta-analysis of gratitude interventions. *Journal of Counseling Psychology*, 63(1), 20–31. https://doi.org/10.1037/cou0000107.
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74, 580–590. https://doi.org/10.1037/0021-9010.74.4.580.
- Diener, E., & Emmons, R. A. (1984). Independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47(5), 1105–1117. https://doi.org/10.4135/9781412956253.n278.
- Diener, E., Emmons, R. A., Larsen, R. J., Griffin, S., Larsen, J., & Griffin, S. (1985). The satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901 13.
- Donald, I., Taylor, P., Johnson, S., Cooper, C., Cartwright, S., & Robertson, S. (2005). Work environments, stress, and productivity: An examination using asset. *International Journal of Stress Management*, 12, 409–423. https://doi.org/10.1037/1072-5245.12.4.409.
- Duhigg, C. (2019). What google learned from its quest to build the perfect team. *The New York Times Magazine*. https://centre.upeace.org/wp-content/uploads/2020/09/7.1-what-google-learnt.pdf.
- Eberth, J., & Sedlmeier, P. (2012). The effects of mindfulness meditation: A meta-analysis. *Mindfulness*, 3(3), 174–189. https://doi.org/10.1007/s12671-012-0101-x.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. https://doi.org/10.2307/2666999.
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, 84(2), 377–389. https://doi.org/10.1037/0022-3514.84.2.377.
- Epley, N., & Schroeder, J. (2014). Mistakenly seeking solitude. *Journal of Experimental Psychology: General*, 143(5), 1980–1999. https://doi.org/10.1037/a0037323.
- Fauver, L., McDonald, M. B., & Taboada, A. G. (2018). Does it pay to treat employees well? International evidence on the value of employee-friendly culture. *Journal of Corporate Finance*, 50(June 2015), 84–108. https://doi.org/10.1016/j.jcorpfin.2018.02.003.
- Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A. P., & Einstein, D. A. (2019). Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs. *Mindfulness*, 10(8), 1455–1473. https://doi.org/10.1007/s12671-019-01134-6.
- Folk, D., & Dunn, E. (2023). A systematic review of the strength of evidence for the most commonly recommended happiness strategies in mainstream media. *Nature Human Behaviour*. https://doi. org/10.1038/s41562-023-01651-4.
- Foreman, A., Glenn, M., Meade, B., & Wirth, O. (2017). Dogs in the workplace: A review of the benefits and potential challenges. *International Journal of Environmental Research and Public Health*, 14(5), 498. https://doi.org/10.3390/ijerph14050498.
- Fredrickson, B. L., Cohn, M., Coffey, K., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045–1062. https://doi.org/10.1037/a0013262.
- Fritz, M. M., Walsh, L. C., & Lyubomirsky, S. (2017). Staying happier. In M. D. Robinson & M. Eid (Eds.), *The happy mind: Cognitive contributions to well-being* (pp. 95–114). Springer. https://doi.org/10.1007/978-3-319-58763-9\_6.
- Grandey, A. A. (2003). When the show must go on: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *The Academy of Management Journal*, 46(1), 86–96. https://doi.org/10.2307/30040678.
- Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. (2014). Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal of Vocational Behavior*, 85(3), 361–373. https://doi.org/10.1016/j.jvb.2014.08.010.
- Hauser, O. P., Gino, F., & Norton, M. I. (2018). Budging beliefs, nudging behaviour. *Mind & Society*, 17(1–2), 15–26. https://doi.org/10.1007/s11299-019-00200-9.
- Hinkin, T. R., & Tracey, J. B. (2010). What makes it so great?: An analysis of human resources practices among fortune's best companies to work for. *Cornell Hospitality Quarterly*, 51(2), 158–170. https://doi.org/10.1177/1938965510362487.



- Jackson, S. A., & Marsh, H. W. (1996). Development and validation of a scale to measure optimal experience: The flow state scale. *Journal of Sport and Exercise Psychology*, 18(1), 17–35. https://doi.org/10.1123/jsep.18.1.17.
- Jacobs Bao, K. (2012). The course of well-being in romantic relationships: Predicting positive affect in dating participants. Psychology, 03(12A), 1091–1099. https://doi.org/10.4236/psych.2012.312A161.
- Jacques-Hamilton, R., Sun, J., & Smillie, L. D. (2019). Costs and benefits of acting extraverted: A randomized controlled trial. *Journal of Experimental Psychology: General*, 148, 1538–1556. https://doi.org/10.1037/xge0000516.
- Jones, D., Molitor, D., & Reif, J. (2019). What do workplace wellness programs do? Evidence from the Illinois Workplace Wellness Study. The Quarterly Journal of Economics, 134(4), 1747–1791. https://doi.org/10.1093/qje/qjz023.
- King, L. A. (2001). The health benefits of writing about life goals. *Personality and Social Psychology Bulletin*, 27(7), 798–807. https://doi.org/10.1177/0146167201277003.
- Layous, K., & Lyubomirsky, S. (2014). The how, why, what, when, and who of happiness: Mechanisms underlying the success of positive activity interventions. In J. Gruber, & J. Moscowitz (Eds.), *Positive emotion: Integrating the light sides and dark sides* (pp. 473–495). Oxford University Press.
- Layous, K., Kurtz, J., Chancellor, J., & Lyubomirsky, S. (2018). Reframing the ordinary: Imagining time as scarce increases well-being. *The Journal of Positive Psychology*, 13(3), 301–308. https://doi.org/ 10.1080/17439760.2017.1279210.
- Lee, H. (2021). Changes in workplace practices during the COVID-19 pandemic: The roles of emotion, psychological safety and organisation support. *Journal of Organizational Effectiveness: People and Performance*, 8(1), 97–128. https://doi.org/10.1108/joepp-06-2020-0104.
- Lipman, V. (2019). Workplace trend: Stress is on the rise. Forbes. https://www.forbes.com/sites/victorlipman/2019/01/09/workplace-trend-stress-is-on-the-rise/?sh=1bfe654e6e1b.
- Lund, P., Bednall, T. C., & Williams, B. (2022). The effects of hybrid work choices and worker needs on employee wellbeing. Academy of Management Proceedings, 2022(1), 15118. https://doi.org/10.5465/ AMBPP.2022.15118abstract.
- Lyubomirsky, S. (2013). The myths of happiness: What should make you happy, but doesn't, what shouldn't make you happy, but does. The Penguin Press.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46(2), 137–155. https://doi.org/10.102 3/A:1006824100041.
- Macdonald, S., & MacIntyre, P. (1997). The generic job satisfaction scale. *Employee Assistance Quarterly*, 13(2), 1–16. https://doi.org/10.1300/j022v13n02\_01.
- Margolis, S., & Lyubomirsky, S. (2019). Experimental manipulation of extraverted and introverted behavior and its effects on well-being. *Journal of Experimental Psychology: General*, 149, 719–731. https://doi.org/10.1037/xge0000668.
- Mari, C., & Meglio, O. (2013). Planning data collection in longitudinal field research: Small and not so small practical issues. In M. E. Hassett & E. Paavilainen-Mäntymäki (Eds.), *Handbook of longitudi*nal research methods in organisation and business studies (pp. 295–317). Edward Elgar. https://doi. org/10.4337/9780857936790.00026.
- Markwell, N., & Gladwin, T. E. (2020). Shinrin-yoku (forest bathing) reduces stress and increases people's positive affect and well-being in comparison with its digital counterpart. *Ecopsychology*, 12(4), 247– 256. https://doi.org/10.1089/eco.2019.0071.
- McCullough, M. E., & Witvliet, C. V. (2002). The psychology of forgiveness. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 446–455). Oxford University Press.
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2001). *The Gratitude Questionnaire-Six Item Form (GQ-6)*. https://socialskillsplus.com/wp-content/uploads/2018/11/Penn-Institute-Gratitude-Questionnaire.pdf.
- McDowall, A., & Kinman, G. (2017). The new nowhere land? A research and practice agenda for the always on culture. *Journal of Organizational Effectiveness: People and Performance*, 4(3), 256–266. https://doi.org/10.1108/JOEPP-05-2017-0045.
- Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. Social and Personality Psychology Compass, 5(1), 1–12. https://doi.org/10.1111/j.1751-9004.2010.00330.x.
- Nelson, S. K., Layous, K., Cole, S. W., & Lyubomirsky, S. (2016). Do unto others or treat yourself? The effects of prosocial and self-focused behavior on psychological flourishing. *Emotion*, 16(6), 850–861. https://doi.org/10.1037/emo0000178.



- Nelson-Coffey, S. K., Fritz, M. M., Lyubomirsky, S., & Cole, S. W. (2017). Kindness in the blood: A randomized controlled trial of the gene regulatory impact of prosocial behavior. *Psychoneuroendo-crinology*, 81, 8–13. https://doi.org/10.1016/j.psyneuen.2017.03.025.
- Nguyen, T. (2015). Employee perks in silicon valley: Technology companies lead the arms race as corporate law trails in representing shareholder interests. *Hastings Business Law Journal*, 12(1), 51–51.
- Packer, J., & Ballantyne, J. (2011). The impact of music festival attendance on young people's psychological and social well-being. *Psychology of Music*, 39(2), 164–181. https://doi. org/10.1177/0305735610372611.
- Parks, A. C., Williams, A. L., Tugade, M. M., Hokes, K. E., Honomichl, R. D., & Zilca, R. D. (2018). Testing a scalable web and smartphone based intervention to improve depression, anxiety, and resilience: A randomized controlled trial. *International Journal of Wellbeing*, 8(2), 22–67. https://doi.org/10.5502/ijw.v8i2.745.
- Pencavel, J. (2015). The productivity of working hours. *Economic Journal*, 125(589), 2052–2076. https://doi.org/10.1111/ecoj.12166.
- Peterson, C. (2006). Character strengths. A primer in positive psychology. Oxford University Press.
- Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., & Keltner, D. (2015). Awe, the small self, and prosocial behavior. *Journal of Personality and Social Psychology*, 108(6), 883–899. https://doi.org/10.1037/pspi0000018.
- Quoidbach, J., Berry, E. V., Hansenne, M., & Mikolajczak, M. (2010). Positive emotion regulation and well-being: Comparing the impact of eight savoring and dampening strategies. *Personality and Individual Differences*, 49(5), 368–373. https://doi.org/10.1016/j.paid.2010.03.048.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1(3), 385–401. https://doi.org/10.1177/014662167700100306.
- Rankin, K., Walsh, L. C., & Sweeny, K. (2019). A better distraction: Exploring the benefits of flow during uncertain waiting periods. *Emotion*, 19(5), https://doi.org/10.1037/emo0000479.
- Reece, A., Cooney, G., Bull, P., Chung, C., Dawson, B., Glazer, T., Knox, D., Liebscher, A., & Marin, S. (2022). Advancing an interdisciplinary science of conversation: Insights from a large multimodal corpus of human speech [Preprint]. arXiv, 1-116, https://doi.org/10.48550/arXiv.2203.00674.
- Regan, A., Walsh, L. C., & Lyubomirsky, S. (2022). Are some ways of expressing gratitude more beneficial than others? Results from a randomized controlled experiment [Advance online publication]. Affective Science. https://doi.org/10.1007/s42761-022-00160-3.
- Reid, R. A. (2005). Productivity and quality improvement: An implementation framework. *International Journal of Productivity and Quality Management*, 1(1–2), 26–36. https://doi.org/10.1504/IJPOM.2006.008371.
- Roe, R. A. (2014). Time, performance and motivation. In A. J. Shipp, & Y. Fried (Eds.), *Time and work: How time impacts individuals*. Psychology Press.
- Rogge, R. D., Fincham, F. D., Crasta, D., & Maniaci, M. R. (2017). Positive and negative evaluation of relationships: Development and validation of the positive–negative relationship quality (pn-rq) scale. *Psychological Assessment*, 29, 1028–1043. https://doi.org/10.1037/pas0000392.
- Rosenberg, M. (1965). Society and the adolescent self-image. Wesleyan University Press.
- Ruch, W., Niemiec, R. M., McGrath, R. E., Gander, F., Proyer, R. T., Ruch, W., Niemiec, R. M., McGrath, R. E., & Gander, F. (2020). Character strengths-based interventions: Open questions and ideas for future research. *The Journal of Positive Psychology*, 00(00), 1–5. https://doi.org/10.1080/17439760.2020.1789700.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39(3), 472–480. https://doi.org/10.1037/0022-3514.39.3.472.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi. org/10.1037/0003-066X.55.1.68.
- Saari, L. M., & Scherbaum, C. A. (2011). Identified employee surveys: Potential promise, perils, and professional practice guidelines. *Industrial and Organizational Psychology*, 4(4), 435–448. https://doi.org/10.1111/j.1754-9434.2011.01369.x.
- Sanchez, L., & Blanco, B. (2014). Three decades of continuous improvement. *Total Quality Management & Business Excellence*, 25(9–10), 986–1001. https://doi.org/10.1080/14783363.2013.856547.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410–421. https://doi.org/10.1037/0003-066X.60.5.410.



- Sheldon, K. M., & Hilpert, J. C. (2012). The balanced measure of psychological needs (bmpn) scale: An alternative domain general measure of need satisfaction. *Motivation and Emotion*, 36, 439–451. https://doi.org/10.1007/s11031-012-9279-4.
- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology*, 1(2), 73–82. https://doi.org/10.1080/17439760500510676.
- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, 80(2), 325–339. https://doi.org/10.1037/0022-3514.80.2.325.
- Shibazaki, K., & Marshall, N. A. (2017). Exploring the impact of music concerts in promoting well-being in dementia care. *Aging and Mental Health*, 21(5), 468–476. https://doi.org/10.1080/13607863.201 5.1114589.
- Shin, L. J., Armenta, C. N., Kamble, S. V., Chang, S. L., Wu, H. Y., & Lyubomirsky, S. (2020). Gratitude in collectivist and individualist cultures. *The Journal of Positive Psychology*, 15(5), 598–604. https://doi.org/10.1080/17439760.2020.1789699.
- Simonsohn, U., Simmons, J., & Nelson, L. D. (2022). Above averaging in literature reviews. *Nature Reviews Psychology*, 1(10), 551–552. https://doi.org/10.1038/s44159-022-00101-8.
- Sin, N., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology*, 65(5), 467–487. https://doi.org/10.1002/jclp.
- Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology*, 70(9), 794–807. https://doi.org/10.1002/jclp.22076.
- Sop Shin, W. (2007). The influence of forest view through a window on job satisfaction and job stress. *Scandinavian Journal of Forest Research*, 22(3), 248–253. https://doi.org/10.1080/02827580701262733.
- Stimec, A., & Grima, F. (2019). The impact of implementing continuous improvement upon stress within a lean production framework. *International Journal of Production Research*, *57*(5), 1590–1605. https://doi.org/10.1080/00207543.2018.1494391.
- Stringer, A. (2023). A comprehensive list of 2023 tech layoffs. TechCrunch. https://techcrunch.com/2023/05/24/tech-industry-layoffs-2023/.
- Sturm, V. E., Datta, S., Roy, A. R. K., Sible, I. J., Kosik, E. L., Veziris, C. R., Chow, T. E., Morris, N. A., Neuhaus, J., Kramer, J. H., Miller, B. L., Holley, S. R., & Keltner, D. (2022). Big smile, small self: Awe walks promote prosocial positive emotions in older adults. *Emotion*, 22, 1044–1058. https://doi.org/10.1037/emo0000876.
- Su, R., Tay, L., & Diener, E. (2014). The development and validation of the Comprehensive Inventory of Thriving (CIT) and the brief inventory of thriving (BIT). *Applied Psychology: Health and Well-Being*, 6(3), 251–279. https://doi.org/10.1111/aphw.12027.
- Temponi, C. (2005). Continuous improvement framework: Implications for academia. *Quality Assurance in Education*, 13(1), 17–36. https://doi.org/10.1108/09684880510578632.
- Tomyn, A. J., Tyszkiewicz, F., M. D., & Cummins, R. A. (2013). The personal wellbeing index: Psychometric equivalence for adults and school children. *Social Indicators Research*, *110*(3), 913–924. https://doi.org/10.1007/s11205-011-9964-9.
- Walsh, L. C., Boehm, J. K., & Lyubomirsky, S. (2018). Does happiness promote career success? Revisiting the evidence. *Journal of Career Assessment*, 26(2), https://doi.org/10.1177/1069072717751441.
- Walsh, L. C., Regan, A., Twenge, J. M., & Lyubomirsky, S. (2022). What is the optimal way to give thanks? Comparing the effects of gratitude expressed privately, one-to-one via text, or publicly on social media [Advance online publication]. Affective Science. https://doi.org/10.1007/s42761-022-00150-5.
- Walsh, L. C., Boz, S. G., & Lyubomirsky, S. (2023). Well-being and career success. In B. Walsh, L. Flores, P. Hartung, F. Leong, & M. Savickas (Eds.), Career psychology: Models, concepts, and counseling for meaningful employment (1st ed., pp. 235–256). American Psychological Association. https://psycnet.apa.org/record/2023-68988-012
- Wayne, J. H., Michel, J. S., & Matthews, R. A. (2022). Balancing work and family: A theoretical explanation and longitudinal examination of its relation to spillover and role functioning. *Journal of Applied Psychology*, 107, 1094–1114. https://doi.org/10.1037/apl0001007.
- Williams, J. M. G., & Kabat-Zinn, J. (2011). Mindfulness: Diverse perspectives on its meaning, origins, and multiple applications at the intersection of science and dharma. *Contemporary Buddhism*, 12(1), 1–18. https://doi.org/10.1080/14639947.2011.564811.



- Worthington, E. L., Jennings, D. J., & Diblasio, F. A. (2010). Interventions to promote forgiveness in couple and family context: Conceptualization, review, and analysis. *Journal of Psychology and The*ology, 38(4), 231–245. https://doi.org/10.1177/009164711003800401.
- Wrike (2019). From positivity to productivity: Exposing the truth behind workplace happiness. https://www.wrike.com/library/ebooks/happiness-survey-report/.
- Zheng, X., Zhu, W., Zhao, H., & Zhang, C. (2015). Employee well-being in organizations: Theoretical model, scale development, and cross-cultural validation. *Journal of Organizational Behavior*, *36*(5), 621–644. https://doi.org/10.1002/job.1990.

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