

Network Impacts on Well-Being: A Review of The Research



The workplace is faster paced and more demanding than ever. In this always-on, hyper-connected environment, some people are overwhelmed and feeling crushed. Others maintain a sense of well-being. We want to know what makes the difference—and help turn our workplaces into positive sources of well-being. This paper presents a brief review of well-being research as it relates to work and relationships. It is a foundation for our newest research study: Networks for Well-being.

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Introduction

Well-being is an individual's sense of satisfaction with his or her life as a whole, the feeling that "life is good." A person with high well-being has inner contentment, an enduring sense of fulfillment, and a view that life is heading in a good direction. Unfortunately for many, well-being is elusive. People today feel more under the gun than ever, pressured by the sheer volume of work and endless collaborative demands, working long hours, sleep deprived and dogged by always-on technology. Many are under threat from automation or job insecurity. The workplace is filled with people experiencing overload, stress, and disengagement. Many leaders see the chronically low well-being around them and are concerned for themselves and others.

Research quantifies and clarifies this crisis of well-being and the impact of low well-being on individuals and organizations.

According to the Gallup-Sharecare Well-being Index, the U.S. has experienced a two-year decline in well-being, ending at an all-time low in what Gallup's research director calls "an unprecedented decline in well-being nationally" (1). Behind the decline, Gallup finds a consistent erosion in the elements of social well-being, defined as having supportive relationships and love in your life, and career well-being, or liking what you do and feeling motivated towards your goals (2).

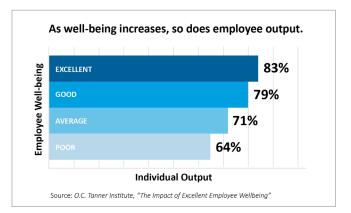
One of the main killers of well-being is stress—and for many people, the primary source of stress is work (3). According to the Attitudes in the American Workplace survey, 52% of workers report feeling stressed on the job and 35% say it is harming their physical or emotional health (4). Stressed-out people are more likely to engage in unhealthy behaviors such as smoking, drinking, drugs, or overeating. They are also more susceptible to chronic illness, mental health conditions, and mortality (3).

Poor well-being drives often-unseen costs to both individuals and their employers. Presenteeism—when people are physically present but underperform mentally—limits potential and undermines success. Stressed-out people tend to make lower-quality decisions, are often less productive, innovative, and engaged in their work (5). In one study, employees with poor well-being reported on average that they were working at only 64% of their maximum ability (6).

Poor well-being also contributes to company costs related to health care and absenteeism. In one study, employees who were low on well-being cost their employers 41% more in healthrelated costs compared to employees who were high on wellbeing (7). Add in the costs of presenteeism, which are estimated to be 2-3 times greater than those of direct medical costs (8), and poor employee well-being can come with a hefty price tag.

Employee well-being does not have to be sacrificed for company achievement. In fact, **employee well-being and corporate performance go hand-in-hand.** According to the World Economic Forum, "When health and well-being are promoted, organizations are seen as 2.5 times more likely to be a best performer and 4 times less likely to lose talent within the next year"(61). Research has linked increases in well-being scores with increases in job productivity and performance (9). Excellent well-being has been associated with behaviors that produce great work such as asking curious, thought-provoking questions and reaching out beyond one's regular team to gain outside perspectives and ideas for well-rounded solutions (6).

What can be done to promote greater well-being? Research consistently finds that our relationships with others play a major role. This literature review sets the context for our research into how networks and relationships—including professional and workplace connections—can be a major driver of well-being.



Four Sources of Well-Being—and their Network Drivers

Research into well-being has emerged over the past two decades with a goal of understanding what contributes to a healthy psychological state and a well-lived life—in contrast to the prior focus of social, psychological, and medical research on understanding the pathology of the un-well. Today, we have numerous theories and approaches that help us understand the sources of well-being.

One of these is Martin Seligman's PERMA model of well-being, which is a widely used standard in the field of positive psychology (10). The model identifies five building blocks of well-being:

Positive emotion – feeling good

Engagement – finding flow

Relationships - authentic connection

Meaning and purpose – purposeful existence

Achievement - a sense of accomplishment

Other well-being models include similar elements and groupings related to positivity, purpose, accomplishment, control, and growth (11); some include factors such as financial security and physical health (12).

All models of well-being that we have found include relationships as one of the key factors. Our premise, however, is that relationships are not a separate factor

or source of well-being. They play a larger, moreencompassing role, underpinning and activating other elements of well-being.

We examined the literature to understand sources of wellbeing and their relational, or network, drivers. We have grouped our results into four key sources of well-being:

- 1 Physical health
- Purpose and positivity
- **3** Resilience
- **4** Growth and aspiration

As we examine the various sources of well-being, we will see that they often feed into each other, potentially creating a reinforcing cycle of strong or poor well-being. Relationships are a thread woven throughout.

• Physical Health

Physical health plays a unique role in driving well-being. How we feel about our health is a strong predictor of how we feel about our lives (3). Understandably, we feel better when we are free from pain or discomfort, and feeling physically well gives us the energy and capability to take steps toward greater well-being or respond to challenges in a wide variety of ways.

Networks have profound effects on our health. Research indicates that social connections affect health through two channels: by direct impact on our physiology and indirectly by influencing our health-related behaviors.

Connections with others create a physiological response, with positive relations prompting healthy response and negative interactions or isolation creating stresses on our system.

- Research consistently shows that people who have satisfying relationships with family, friends, and community have fewer health problems, lower levels of anxiety and depression, and live longer (13).
- Behind these outcomes, we find physiological drivers. Social support has been related to lower blood pressure, better immune response, and a healthier inflammatory process, with implications for reduced risk of diseases such as cardiovascular disease, stroke and cancer (14, 15, 16, 3).
- In contrast, while social support has been found to reduce physiological stress responses, social isolation has been found to be "on a par with high blood pressure, obesity, lack of exercise, or smoking as a risk factor for illness and early death" (17). One theory even treats social isolation, conflict, or lack of support as a chronically stressful condition to which our bodies respond by aging more rapidly (18).

Connections with others drive health behaviors through norm-setting. Many health-related outcomes move through social networks in a process called "social contagion." For example, in a landmark study of 4,700 people over 20 years, an individual's chance of becoming obese was found to increase by 57% if that individual had a friend who became obese in a given time period. Similar evidence shows a range of healthrelated behaviors spreading through networks, including smoking and drug use. Mental health outcomes have also been found "contagious," with the odds that a person will become depressed increasing by 118% if a friend is depressed, and the likelihood of a person being happy increasing 63% if a near-by mutual friend becomes happy (19).

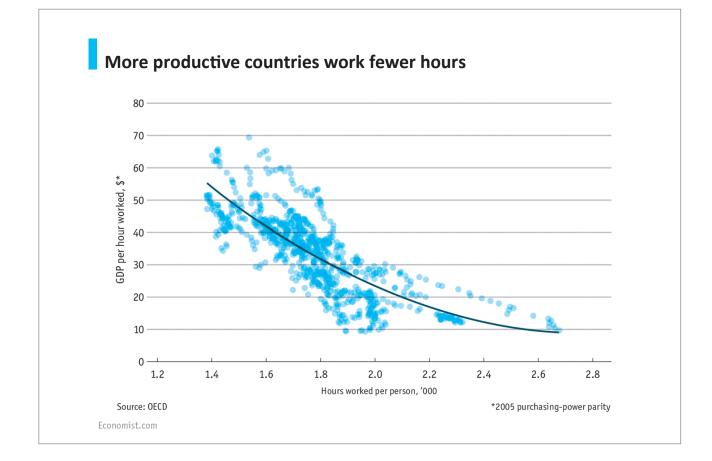
Interestingly, in the obesity study, it was not going to fast food restaurants or cooking high-fat meals together that primarily drove the contagion; increasing geographic distance among people did not diminish the effect. Instead, the study concluded that the key driver was a change in people's norms about the acceptability of being overweight. With obesity considered normative, the barriers to overeating and sedentary behavior were lowered.

The norms established by others in the workplace can also shape our behavior in ways that affect physical and mental health. Expectations for long work days and to be accessible 24/7 have become common in many workplaces—sometimes by direct need, but more often by the habits and culture around us. They signal to us that long hours mean commitment and loyalty; indicate toughness, strength, and competitiveness; and mark how indispensable we are. Busy is the new cool (3), but it is a norm that has negative health consequences.

In one study of work hours, people who worked 10 hours per day were about 45% more likely to have suffered a heart attack than those working 8 hours per day (20). In a study of 365 working adults, the need to be "always on" and available for email led to burnout and diminished work-family balance (21). Long work hours also reduce the time available for sleep, and sleep deprivation has been shown to be detrimental to memory, mood, and cognitive functioning, and to exacerbate stress (22). The flip side is that sleep can directly contribute to wellbeing. A study of more than 7,000 U.S. adults found a positive relationship between more hours of sleep and self-reported well-being (23).

The good news is that there is evidence that more work hours do not necessarily lead to greater productivity; in fact, the opposite may be true (24, 3). If we work for a company that signals through behaviors up and down the hierarchy that down-time is important and expects people to carve out time for sleep, exercise, and health-promoting endeavors, then we are more likely to pursue those behaviors ourselves.

Some companies are starting to experiment with norms for achieving a greater mix of health-positive behaviors. Google, for example, established the "Dublin Goes Dark" program where at the end of the day, employees at their Dublin office



would leave anything that beeped at the lobby desk. The report was "blissful, stress-less evenings" (25).

Networks can impact health by connecting people to either healthy or unhealthy enablers. An enabler is someone who makes it possible for us to initiate or continue our healthy or unhealthy behaviors. In the case of exercise, for example, one study showed that support from enablers can increase the amount of time spent exercising. The most common forms of support included discussing exercise, exercising together, offering to exercise together, and celebrating the enjoyment of exercise (26). A review of studies points to two main types of support that are positively associated with adhering to exercise routines (27).

- *Emotional support,* where the enabler shows empathy and concern, for example by offering understanding when a friend or family member wants to skip a workout, then encouraging them to persevere and celebrating when they do.
- **Practical support,** where the enabler helps to make the healthy activity possible, for example by going to the gym

together or taking on household responsibilities so a spouse or partner has time to exercise.

An enabler's intentions are usually good but the behaviors they facilitate can go either way. Consider, for example, alcohol usage. Unhealthy enablers might make alcohol ubiquitously available, continue to proffer when it's clear we've had enough, and commiserate with our hangovers the next day (3). Healthy enablers, on the other hand, might savor a fine Cabernet with us and bring along a bottle rather than a case.

Enablers might promote healthy behaviors—and as a consequence, well-being—in a variety of ways, for example, by facilitating an exercise routine, getting you to join the local cycling club, or signing you on to the local program for farmdelivered produce. A partner might agree for the family to shut down electronics earlier in the evening or change habits to ensure more and better sleep. Healthy enablers at work may go with you to a health screening, agree to pack healthy lunches, or hold walk-and-talk meetings whenever possible.

Purpose and Positivity

Well-being is also clearly tied to patterns of thoughts and feelings over time, including those that establish a sense of purpose and positivity. Purpose is the sense that your life is meaningful and serves aims higher than yourself. People with purpose tend to have clarity about what matters and why, like what they do each day, and feel motivated to achieve their goals. People experience positivity when they notice what is good and cultivate positive emotions.

People with a strong sense of purpose in life tend to do better on a range of measures of physical health, psychological health, longevity, and overall well-being.

- Sense of purpose has been related to a reduction in cardiovascular disease. In one study, a one-point increase on a six-point scale measuring purpose in life corresponded to a 27% decreased risk of having a heart attack among people with heart disease. For older adults, a one-point difference in purpose translated to a 22% decreased risk of stroke (28).
- A sense of purpose can work to reduce stress. A study of 6,840 teachers found that individuals with a greater sense of purpose in life were better at managing stress and had better self-rated health status (29).
- Having a sense of purpose has been linked to better sleep, lower risk of dementia, and lower risk of depression (30, 31, 32).
- People with higher purpose in life tend to engage in healthier behaviors such as exercising more or availing themselves of preventive health services, leading to better overall health (33).

 A study examining the relationship among purpose, hope, and life satisfaction among 153 adolescents, 237 emerging adults, and 416 adults showed that people with an identified purpose in life tended to have greater life satisfaction and overall well-being across all three stages (34).

There is evidence that companies driven by purpose are more successful in the long run than those driven solely by profit and, not surprisingly, tend to be more enjoyable places to work. Employees with a strong sense of purpose tend to be highly engaged in their work and focused on maximizing the value of their effort (35). Employees are also less likely to be burned out when they can connect their work to their company's mission and purpose (36).

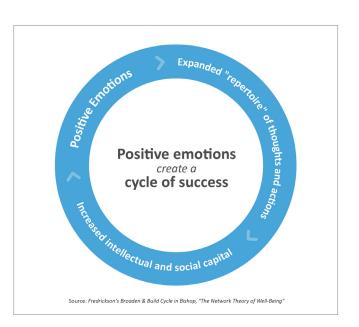
Positive emotions play an essential role as the "nutrients for our overall wellbeing" (37). According to Barbara Fredrickson's "broaden and build" theory of positive psychology, our ability to tune in to micro-moments of positivity creates an upward spiral of well-being and success. Having awareness of what is good and choosing positive interpretations of a situation lead to positive emotions and positive outcomes (38).

When we focus our attention on sources of positive emotion around us—such as our social interactions, learning, or helping others—our moods and emotions get a lift. This in turn triggers cognitive changes that open us up to what Fredrickson calls a greater "repertoire" of thoughts and actions. We become more receptive to intellectual or artistic play, are more likely to explore and extend our knowledge and experiences, and are more likely to savor and integrate experiences into new world views. As we become more expansive in what we think and do, we build more intellectual and social capital. Shared moments of positive emotion foster enduring bonds with others that support us in our endeavors. As a result, we learn more and perform better—leading to greater positivity and so the cycle continues. Thus, the ability to frame our world in positive ways can impact not just our well-being today but our trajectory of well-being over time (39).

There is also evidence that the practice of positivity helps us to be more resilient by acting as a resource for coping and a means to counteract the negative emotions that accompany adversity. Resilient people use a diverse set of strategies such as humor, creative exploration, relaxation, and optimistic thinking, which serve to cultivate positive emotions such as amusement, interest, or hope (39).

Networks and relationships can impact both our sense of purpose and positivity.

Interactions with others can create a sense of purpose by helping us to find our higher aspirations, feel part of something larger than ourselves, and connect on meaningful grounds. Research has found that a sense of purpose is not necessarily dependent on the mission of the organization, the product it creates, or the nature of the work; purpose is often established through relationships and interactions in our networks. A company whose mission may be inspiring (e.g., curing disease, delivering a service or product to underserved communities) may nonetheless have employees who are disengaged. In contrast, an organization or team with a mundane mission or task may have employees who are engaged and feel that their work has deep meaning. Connecting with others who share values or care about similar outcomes and working with energizers (people you leave you feeling enthused and motivated) help to build purpose. For example, energizers, who often talk about the "why" of the work and what is possible rather than focusing on the demands or the negatives, can contribute to our sense of purpose. On the other hand, de-energizers can drain us of our motivation and sense of value in the work we do. As people experience



interactions with energizers and others who help them see that their efforts have meaning, they bring themselves more fully to their work. Negative or draining interactions may remain but seem more manageable or balanced if people have a few purposeful relationships at work (40, 41).

Networks are sources of both positivity and negativity.

They can influence how we perceive the events in our lives (e.g., a problem vs. an opportunity; a chaotic meeting vs. a creative one) and through their own behaviors and perspectives, help us to frame our world in positive or negative ways. In Fredrickson's "broaden and build" cycle described above, networks play a crucial role in helping us to learn and perform better, which in turn presents us with greater opportunities for positive emotions. In our pursuit of positive relationships, we need to keep an eye out for negative ones as well for they are inevitable and, in some cases, inescapable (e.g., bosses, family members), and research consistently shows that multiple positive ties are needed to counteract a single positive one (42, 43).

3 Resilience

Stresses and set-backs are an inevitable part of life. Wellbeing is affected by how we handle daily difficulties as well as significant hardships and life-changing events. Resilience, often described as the "ability to bounce back after negative events" (44), is therefore an important source of well-being over time. We exhibit resilience when, after facing adversity or stress, we are able to return to our original state of wellbeing—or grow to achieve an even higher state.

Studies have found that resilience predicts subjective well-being (45) and other related dimensions such as job satisfaction (46) and lower levels of depression (47). There is also evidence that

resilience can help protect us from physical illness (48). Some researchers see a reciprocal relationship between resilience and well-being. In this view, well-being provides a necessary foundation for resilience—the better you feel about your life, the greater your capacity to face adversity—and the positive emotions that underpin well-being also promote the flexible thinking, adaptation, and coping abilities that need to be drawn upon when adversity strikes (49).

Other factors commonly associated with resilience include a belief in the ability to achieve one's goals (self-efficacy), the ability to regulate strong or difficult emotions and stay balanced, optimism, and feeling in control of one's life. "De-catastrophizing," or putting things in a different, more positive frame, is also a skill associated with resilience (71). As we'll see below, some of these are also directly associated

with well-being.

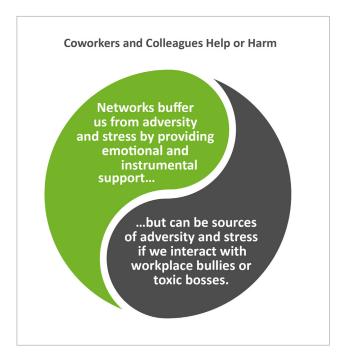
Connections with others can support resilience. The American Psychological Association states in its resilience report, "Many studies show that the primary factor in resilience is having caring and supportive relationships within and outside the family. Relationships that create love and trust, provide role models, and offer encouragement and reassurance help bolster a person's resilience" (50). Resilience relies on the "resources that an individual can draw on to overcome adversity"—and one of those key resources is social support.

It doesn't matter where the support comes from—family, friends, co-workers, or people from any walk of life—as long as an individual can call upon them and expect support in a time of crisis.

Connections with others can help us to weather storms by providing emotional support (e.g., listening, empathizing), instrumental support (e.g., providing useful information, actively helping out or problem solving), and collective response. People who believe they have access to support tend to see potentially threatening situations as less stressful, making it easier to cope (51). Research has shown that social ties measurably reduce the effects of trauma and help us to work through adversity. In fact, looking at a major disaster such as the nuclear power meltdowns in Fukushima, Japan, researchers found that factors such as health and wealth did little to ease residents' anxieties about their health and livelihoods. Instead, having neighbors and friends who evacuated as a group was the most powerful predictor of lowered post-traumatic stress disorder and depression (52).

Networks help strengthen resilience by buffering us from work-related adversity and stress. Personal support in the form of sensemaking, advice, reassurance, or encouragement can help to relieve our stress and replenish our energy (53). If an employee feels safe or among friends, he or she may be able to vent anger and frustration, also helping to relieve stress (54). When co-workers show concern and understanding, an employee may feel like others care, which may encourage him or her to speak up or take action (55). The support of co-workers can also contribute to an employee's sense of self-worth and he or she may feel empowered to overcome adversity, thereby helping with resilience and recovery.

It is also important to note that while they can be valuable sources of support and coping, **our colleagues and co-workers** can also act as sources of stress themselves. Co-workers can create stressful environments, and the extreme example of the toxic co-worker is the workplace bully. Workplace bullies act in a consistently hostile manner and do things like judging another's work unjustly or in an offending manner, interfering with another's ability to express opinions, or assaulting someone's private life. "Toxic bosses" create stress when they behave unpredictably, erode workers' sense of self-confidence and self-worth, fail to communicate adequately, or create a work environment that is either boring or over-stimulating. Workers who deal with toxic bosses or workplace bullies can suffer from depression, anxiety, and burnout. For workplace bullying, the impacts are not limited to the targets themselves. Bystanders also report reduced well-being, making it an issue for the entire work unit (56, 57).



As with any type of workplace adversity, social support and workplace friendships provide a benefit for coping with difficult bosses or co-workers. However, counteracting toxic work relationships remains challenging for several reasons. Workplace friendships typically provide emotional support and stress release, but are not likely to change the bullying or dysfunctional behaviors at the root of the problem (58). Toxic relationships at work can be difficult or impossible to sever because of reporting relationships, working together on a team, or task dependence. Further, research shows that "bad" ties are more potent than "good" ones (42). In one study looking at the health impact of relationships, it took 7.2 positive relationships to compensate for one negative relationship (43).

4 Growth and Aspiration

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A sense of personal growth and development is essential for well-being. With personal growth also comes the feeling that we are making progress towards our aspirational selves—the people we would ideally like to be. We find four pathways through which personal growth contributes to well-being.

Growing in competence, with the sense that "I'm good at something." Moving in the direction of our goals or achieving mastery of a skill or field boosts our sense of competence. Sense of competence is a fundamental human need and studies show that competence is related to well-being. One study even tracked well-being on a day-to-day basis and showed that "good days" were those in which participants felt more competent in their daily activities (59). Having a sense of control and believing in yourself, that you can succeed or accomplish a task, or the sense that "I'm in charge." Numerous studies support a relationship between feeling in control of your destiny, known as self-efficacy, and wellbeing. Several describe a mechanism wherein the more control and confidence we feel, the more capable we feel of facing the demands of the workplace. This in turn reduces stress—and lower stress enables well-being (60, 62) Job control is a major factor contributing to well-being. For example, research has found that employees who go through a reorganization but have influence over the process have higher levels of well-being (fewer illness symptoms and absences, less depression) compared to those with lower levels of influence (63).

Feeling a sense of achievement, that **"I'm accomplishing something."**

By reflecting on what we've done and feeling positive about it, we gain a sense of achievement. As with many of the elements of well-being, it's subjective. Two people can accomplish the same task and feel very differently about it. Key to gaining well-being from our achievements is the ability to savor them and bask in the moment, paying conscious attention and appreciating them (64, 65).

Feeling part of a give-and-take, or a reciprocity, in which **"I can help and be helped."**

Reciprocity is a cornerstone of the positive, satisfying relationships that are essential to well-being tend to flourish when both parties have the opportunity to both give and receive (66).

Our relationships with others can play several key roles in personal growth and achieving our aspirational selves.

- More successful people connect with others to both innovate and execute work more efficiently. They tap into a diverse network for early ideation and problem solving, and by building trust and energizing relationships, they benefit from the creative efforts of others. They also extend their own abilities and achieve scale through collaborations; wield influence through connections with key opinion leaders in the network; and through relationships are able to adapt with greater agility to changing circumstances and roles (41). Through these types of networks, we find pathways contributing to our sense of competence, control, and achievement, as well as opportunities for reciprocity.
- We learn from the people in our networks. Even in an age where we have access to vast repositories of knowledge online, people continue to rely on their connections for information that is personalized and relevant to the context of their interests (67). We also learn about ourselves

through our networks. Truth-tellers—people who provide perspective and will tell you when you're wrong—are especially important as we progress in the hierarchy. Connections outside of the workplace, that we may form in a variety of ways such as community volunteering, musical groups, religious activities, or sports groups, help to develop and reveal our dimensionality—the many different sides to us and what we have to offer. They can also provide a reality check outside the bubble of work; provide the opportunity to learn from people in different spheres of life, and to notice and appreciate the good things around us (41).

 Our networks play a role in building a sense of control and autonomy. Diverse networks that span different workrelated and outside-of-work worlds can provide us with a number of benefits. One is that they can provide us with a more diverse identity, hence less reliance on a single sphere of our lives. We may feel disempowered in a work role but able to compensate to some degree through, for example, our involvement in charity work or a local sports club. Diverse networks can also provide us with career options and the sense that we still have the ultimate source of jobrelated control: moving on to another position.

- Our aspirational selves can be affirmed through our relationships with others; that is, we often see ourselves through our reflection in others' eyes. People who belong to social circles that affirm their self-concept feel that they can "be themselves" and rate higher on self-esteem and self-efficacy (68). Since many of the contributors to well-being are subjective (e.g., sense of achievement, competence), the people around us can either boost those self-perceptions or undermine them. Other people can also strengthen our appreciation of our accomplishments by helping us to savor the moments in very conscious ways and "lock them into the vault of great things we can re-experience over and over again" (69).
- Well-being is strengthened through reciprocity, in particular through emotional support that that is both given and received. Conversely, relationships that are unbalanced, where one party either gives or receives excessively, can be detrimental to well-being. A lack of reciprocity has been associated with a variety of negative states such as

depression, loneliness, marital dissatisfaction, and burnout (70, 66). But well-balanced reciprocity contributes to wellbeing even beyond its immediate recipients. Reciprocity contributes to positive emotions and the more we experience positive emotions, the more likely we are to help others in need—even those with whom we are not already in a reciprocal relationship. Our help can engender a sense of gratitude, which can then create the urge to reciprocate and to further help others, continuing the cycle (39). As we build well-being in ourselves, we help to build it in the world.

• Networks offer us serendipitous opportunities for growth and discovery. Things emerge through networks that help us become and recreate ourselves in ways we would not have predicted. People who enter our lives, or who we connect with by "throwing out anchors" to activities or commitments that broaden us—whether physically, socially, intellectually, spiritually, or communally—can contribute in unexpected ways to our accomplishments, our learning, or our ability to help others. Connections to people in diverse spheres of life can sometimes lead to greater discovery and growth than the best-laid self-development plans.

Implications and Next Step for Research

We are beginning a research study designed validate the network drivers of well-being and extend the research to help people to build these benefits into their network, relationships, and interactions.

For leaders and employees to capitalize on the network drivers of well-being, we need to fill in several missing pieces of the puzzle. Specifically:

- Who are the people who can help us to build physical health, purpose and positivity, buffering and resilience, and to grow into our aspirational selves? Are they family, friends, coworkers, others? Do we rely on different people for different types of support or the same people for multiple things?
- How are relationships for well-being initiated, built, and sustained? Especially in the face of hyper-demanding work environments, what practical tactics and subtle shifts allow people to stay connected? What steps can people take to

surround themselves with healthy rather than unhealthy enablers and role models? How do they make time for family and friends?

• What are the visible or invisible things that people are doing in these relationships to create well-being? For example, what actions on behalf of a supportive colleague help to counteract the effects of toxic ones and enable us to bounce back? How do people deal with negative interactions—do they stop interacting, change the nature of the interaction, change their own reactions? Or, what are the things that people in our network do to create a sense of purpose or positive framing for us?

By answering these questions, our latest research study will form the basis for a set of resources to help individuals and organizations understand the ways relationships are (or are not) contributing to their well-being and strategies to take, individually and collectively, to drive well-being.

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