Is AI the Answer to Employee Mental Health and Well-Being Challenges?

Employee mental health and well-being are declining, according to our recent human capital survey of more than 1,100 mostly office workers; leaders can leverage AI to begin to reverse this trend in their organizations.

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- **The urgency around addressing the mental health crisis that organizations face continues to grow as the situation worsens**. When we asked employees about their levels of mental health, employee engagement, and sense of belonging compared to just six months prior, nearly one-third self-reported lower levels for each of these attributes. Perhaps even more sobering, 69% said they are working harder than is expected of them.
- **Traditional approaches to addressing employee mental health challenges (stress, anxiety, burnout) have often failed to deliver the intended improvements, which can have significant cost and productivity impacts**. In our 2022 mental health and well-being survey, 88% of respondents told us their organizations offered programs that support emotional well-being, but only 29% of respondents found them helpful. Our 2023 survey found that at companies still offering well-being programs, fewer than 25% of C-Suite executives find them helpful.
- **Using personalized, AI-driven immersive therapies can help leaders address the mental health crisis at their organizations**. Companies can tailor programs to specific needs and preferences, resulting in tangible improvement in metrics that matter to productivity, engagement, retention, mental health, well-being levels, anxiety, and burnout. For example, 76% of

users of Bank of America's AI-driven, virtual reality therapeutics platform reported reduced feelings of stress and anxiety as measured on the platform over a six-month period.

The Urgency Around Addressing the Mental Health Crisis That Organizations Face Continues to Grow as the Situation Worsens

More than 1,100 employees (largely knowledge workers across a range of industries and generational cohorts in the United States) responded to a human capital survey by The Conference Board fielded in February and released in May 2023 asking about their levels of mental health, employee engagement, and sense of belonging compared to just six months prior. Some 34% self-reported a lower level of mental health, 37% said their level of engagement is lower, and 37% said their sense of belonging is lower. Perhaps even more sobering is that 69% say they are working harder than is expected of them. Particularly affected are women and millennials.

Many workplace factors have an impact on mental health. According to this same survey, these factors include **increased work hours** (48% of workers who reported decreased mental health worked 50+ hours a week, with 49% of women saying increased workloads/hours hurt their mental health, compared to 39% of men); **heavy workloads** (50% of millennials say their workload/hours hurt their mental health, compared to 48% of Gen X, and 40% of baby boomers); **poor workplace communication** (42%), **lessened ability to balance the demands of work and personal life** (41%); **time spent in meetings** (40%), and **toxic workplaces** (26%).

Executives are not immune to mental health challenges. A Deloitte survey of more than 2,000 employees and executives found that more than three-quarters of the C-Suite (76%) said the pandemic has negatively affected their well-being and nearly 70% are "seriously considering quitting for a job that better supports their well-being." That same study found that the vast majority of the C-Suite respondents (95%) agree that executives should be responsible for employees' well-being, and 96% already feel responsible in their current roles; yet 68% admit they're not doing enough to support employees, and many do not have a clear picture of employee struggles.

Before looking at the societal microcosm of the workplace, it is important to note the backdrop of home and community from which these employees enter the workplace. Suicide rates in the US have risen by 30% since 2000.[1] Almost one-third of US adults now report symptoms of depression or anxiety,[2] which is three times as many people as in 2019—despite a 40% increase in the use of mental health services from 2019 to 2022.[3] More than 70% of people who need mental health care lack access to high-quality care,[4] and many cannot afford mental health care.[5] However, even when people do have access to care, a recent review of meta-analyses indicated that the impact of pharmacotherapies and psychotherapies is low.[6] Also,

mental illnesses are prone to negative judgments and stigmatization, and many people are thus reluctant to seek help.[7]

In the May 2023 survey from The Conference Board referenced earlier, 50% of respondents felt they needed time off to address mental health issues but did not explicitly request a mental health break; instead, they took unofficial mental health days (13%), used sick days (19%), or continued to work (18%). Workers are less than comfortable speaking about mental health challenges and overall well-being at work; the same May 2023 study found that 38% do not feel comfortable speaking to their manager about their mental health, more than double the number (18%) who were not comfortable a year ago.

Most employees say their health has stayed the same or worsened in the past year, while most executives say they believe their workforce's health has improved, according to a 2022 Deloitte survey of 3,150 C-Suite executives, managers, and employees in four countries, including the US;[8] C-Suite executives are struggling, too.[9]

A wealth of studies show that unaddressed mental health declines lower productivity and increase both absenteeism and presenteeism.[10] In the May 2023 study, nearly 70% of workers who report decreased mental health also report decreased levels of engagement. For every employee experiencing mental distress, employers incur $15,000 per year in lost productivity, health care costs, and turnover.[11]

Sarah Lenz Lock, Senior Vice President of Policy and Brain Health at AARP and Executive Director of the Global Council on Brain Health, has pointed out that a mentally sharp workforce brings much positivity to the economy, including reduced health care costs, and increases in "brain capital." She points out that impaired brain health may be costing the global economy as much as $8.5 trillion a year in lost productivity.[12]

And there is a human cost as well. Older people with self-neglect (which the NIH defines as a "profound inattention to health and hygiene") can see between a sixfold and fifteenfold increase in one-year mortality rates compared to those without self-neglect.[13] In organizations, people may be too burned out to care, or they may not believe that the risk of speaking up outweighs the benefits of taking time for self-care.

Finally, emotional and psychological well-being is a very high priority for workers; its support, or lack thereof, can play a key role in attraction and retention of workers. A recent survey by the American Psychological Association (APA) found that 92% of workers said it is very (57%) or somewhat (35%) important to them to work for an organization that values their emotional and psychological well-being, and 92% said it is very (52%) or somewhat (40%) important to them to work for an organization that provides support for employee mental health. Of note, 1 in 5 said they worked in a toxic environment, a key contributor to diminished psychological well-being. That same survey by the APA found that employers generally think their workplaces are a lot healthier than their workers do.

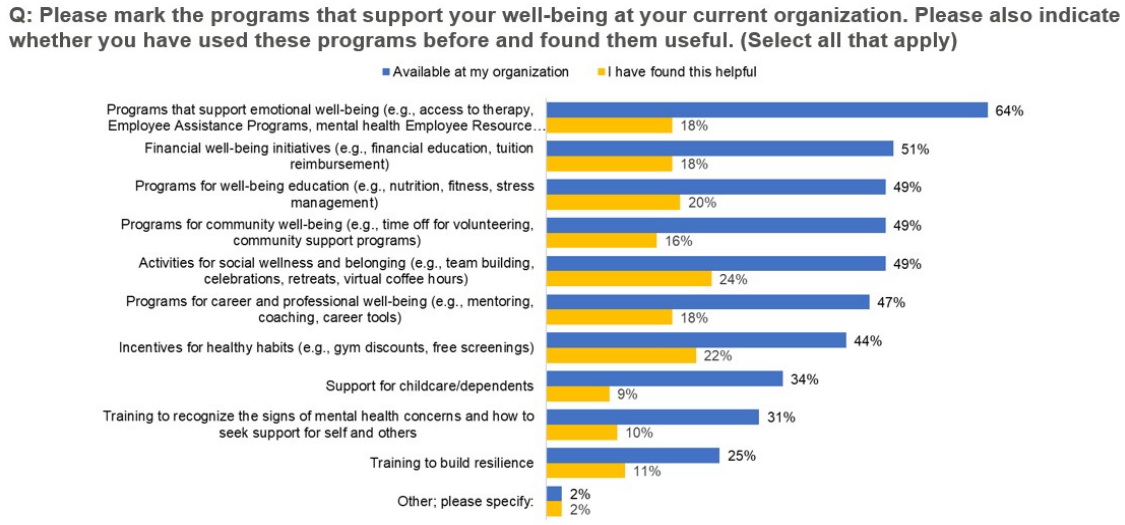
Traditional Approaches to Addressing Employee Mental Health Challenges Have Often Failed to Deliver the Intended Improvements, Which Can Have Significant Cost and Productivity Impacts

In a mental health and well-being survey fielded by The Conference Board in April 2022 during the throes of the global pandemic, 88% of respondents told us their organizations offered programs that support emotional well-being (e.g., mental health resources, employee assistance programs)—up from 66% in April 2021—but only 29% of respondents found them helpful.

Our May 2023 study, fielded in February, found that not only were fewer organizations likely to offer programs related to emotional, mental health, or well-being than in the prior year (see Figure 2), but among executive respondents whose organizations did offer them, fewer than 25% found any one of them useful.

Figure 1

The C-Suite rarely finds the traditional methods of supporting well-being in the workplace helpful



Note: 87 C-Suite executives responded; survey fielded in February 2023

Source: *Mental Health Worsens for 34% of US Workers*, The Conference Board, May 2023

The May 2023 study also found that, among those for whom key programs were not offered, 37% of respondents would find training to recognize signs of mental health concerns useful and 41% would find training to build resilience useful.

Perhaps the shrinking menu of mental health and well-being programs is due to overall budget cuts and changing business conditions, or it may also signal a loss of support by decision-makers in the absence of demonstrable effectiveness.

Figure 2

Mental health support programs and initiatives are less likely to be offered than even a year ago

Note: 1,101 respondents (fielded April 2022); 1,104 respondents (fielded February 2023)

Source: *Mental Health Worsens for 34% of US Workers*, The Conference Board, May 2023

Clearly, our current approaches do not have the impact we would hope, and support for their continuation may be in jeopardy. If what we are doing is ineffective, what might be effective?

Using Personalized, AI-driven Immersive Therapies Can Help Leaders Address the Mental Health Crisis at Their Organizations

Artificial intelligence (AI) has been with us for some time, but we have moved into a new era. Public access to ChatGPT and other generative AI platforms, available since 2022, has changed the landscape and the conversation about usage in the workplace, especially as it relates to leveraging these platforms to generate words, videos, and images that, among other things, enhance and personalize the customer experience, support marketing campaigns, glean insights from massive amounts of data, create custom investment portfolios, and free workers to focus on higher-order tasks.

While the public has access only to earlier versions of generative AI, it is clear that future released versions will be faster, smarter, more expansive, and increasingly more accurate and effective. The use cases for AI, writ large, to address mental health and well-being in the workplace are only beginning to emerge. Below are two examples that, even in a nascent stage, offer hope for a more effective approach to dealing with the mental health crisis.

Bank of America: Succeeding with an AI-driven digital therapeutic platform

There is a deep focus on employee mental health and well-being at Bank of America. Michael Wynn, Senior Vice President, Innovations and Learning Technology Executive for The Academy at Bank of America, believes that corporate learning plays a key role in supporting employee well-being, especially if corporate learning can be extended to help employees learn the skills and techniques that support higher levels of mental health and well-being. Concerned about the limits of current e-learning models, Bank of America invested years ago in virtual reality (VR) headsets to leverage AI-based interventions to teach conversational techniques and to help people learn various scenario-based competencies, such as the skills necessary to deal with a robbery.

Wynn and his colleagues decided to use Reulay's AI-driven digital therapeutic platform, designed to reduce levels of stress and anxiety, as part of the bank's efforts to bolster employee emotional well-being. Two factors drove the decision to partner: first, during pilot observations, employees liked the five-to-10-minute, brain-based video experiences and a feed of no more than three minutes with growth mindset tips, high-performance tips, and loving-kindness meditations; second, the Reulay system was built on a machine-learning platform (which offers personalized interventions) integrated with biometrics on a reporting platform that Wynn and his colleagues could monitor and use to make data-driven decisions.

Reulay has designed a nature-based channel that houses seven categories of videos, each targeting a different dimension of anxiety and running either five or 10 minutes long. Users choose what they most want from the following categories: Feel calm (addresses feeling overwhelmed); Reduce worry (addresses worry and negative thinking); Improve focus (addresses distraction); Relax my body (addresses body tension); Escape threat (addresses entrapment); Enhance a sense of possibility (addresses difficulty thinking about the future); Induce awe (addresses boredom and feelings of being "stuck").

Over a six-month period, 24 participants were randomly selected to watch two Reulay VR experiences targeting improvement in anxiety, emotional distress, and focus levels. Standardized questionnaires that measure these variables were administered prior to and after these 10-minute experiences. Overall, each person had four exposures, as each experience was watched on an iPad or a VR headset.

Preliminary usage data indicated that four of the six Reulay interventions (Calm, Focus, Worry, Somatic) were successful in addressing the required relief for participants. The table below illustrates that improvement in these four was statistically significant; the fifth was trending in the correct direction, but both the fifth and sixth experiences (Sublimity, Possibility) had sample sizes too small to measure significance.

Figure 3

The VR therapeutic sessions succeeded in relieving symptoms for most participants

Maximum "post-pre scores" on target symptoms matched with the corresponding video category requested (X-axis: target symptom reduction requested; Y-axis: target symptom reduction achieved)

		Possibility	Calmness	Worry-reduction	Sense of escape	Focus	Relaxation	Awe/Sublimity
	N							
Calm	30	0.67**	1.27**	0.67**	0.59*	0.85**	0.69**	0.31**
Focus	15	0.33*	0.47**	0.33**	-0.07	1.47**	0.33*	
Worry	8	0.25	0	1.38*	0.13	-0.13	0.43	0.8
Somatic	12	0.25*	0.42*	0.75**	0.5**	0.33**	1.67**	0.17
Sublimity	3		0.33	-0.33	-0.33	0.67	-0.67	1.33
Possibility	3	0.33	0.33	0.33	0.35	0.33		

** Statistically Significant *Statistical Trend

Source: Reulay Innovation Lab

In addition, 76% of all Reulay platform users reported reduced feelings of stress and anxiety as measured on the platform over the prior six months.

Research has shown for some time that, when a technology is chosen, it is important for it to be scalable so everyone in an organization can benefit from having access to it. There is also significant evidence that personalization could make a tremendous difference to outcomes.[14,15,16]

Mayo Clinic: Reducing anxiety with nature-based VR viewing experiences

In a clinical trial, the Mayo Clinic partnered with Reulay in an effort to reduce anxiety and burnout symptoms and improve focus by combining nature-based interventions with VR to decrease anxiety in the workplace.[17]

Twenty-four frontline health care providers participated in the pilot, which took place during the COVID-19 pandemic. All participants attended in-person consent, baseline, and end-of-study visits. The intervention consisted of viewing two nature-based scenes ("Walk in the Woods," to decrease feelings of being overwhelmed, and "Forest of Focus," to increase focus) through VR or with computer 4K graphic imagery. The viewing order of these video experiences was randomized. Outcomes measured were safety, acceptability, and changes in intensity of anxiety, emotional distress, and focus. Specifically, rather than looking at anxious traits, the study examined anxiety as a state—that is, it examined whether, at any given moment, anxiety and emotional distress could decrease and focus could increase.

Specifically, the study results showed the following:

- 96% of participants felt relaxed after seeing the imagery;
- 96% would participate in the study again and would recommend it to others;
- With respect to anxiety, the VR "Walk in the Woods" had the greatest reduction results from pre to post intervention, followed by VR "Forest of Focus"; and
- All four sessions had a significant decrease in score from pre to post (P-values ≤.005) assessment of anxiety, emotional distress, and focus.

In a third-party review of the study and the results, these efforts were shown to reduce anxiety and emotional distress while improving focus. The results were very promising for improving mental health in the workplace; they are particularly significant given that anxiety disorders are the most prevalent mental health condition. Anxiety frequently disrupts the ability to focus—a critical faculty in any work environment.

Feedback from the Bank of America and Mayo Clinic case studies will allow Reulay to design and unleash the latest functionality of the AI-supported platform to provide further customized experiences, tailored to the user for greater impact.

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For more information on Bank of America's commitment to supporting emotional well-being and mental health, watch the recent webcast with Michael Wynn, Senior Vice President, Innovations and Learning Technology Executive for The Academy at Bank of America, which focuses on this initiative, and listen to this podcast with Sheri Bronstein, Chief Human Resources Officer at Bank of America.

For more information on the adoption of this technology at the Mayo Clinic, see:

- *A Study to Assess Virtual Reality by Healthcare Providers to Improve Focus and Reduce Anxiety*
- Ivana T. Crognan et al., *Virtual Reality for Health Care Professionals During a Pandemic: A Pilot Program*, Journal of Primary Care & Community Health 13 (December-January 2022).
- In addition, Mayo Clinic has recently requested Reulay experiences for the Complementary and Integrative Medicine Program run by Brent A. Bauer, MD.

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