MAY 2025 | THE PREMIERE EDITION

wellbeing

SCIENCE IN ACTION

A PUBLICATION OF HUMIN (fmr Healthy Minds Innovations)
IN STRATEGIC PARTNERSHIP WITH THE CENTER FOR HEALTHY MINDS

IN THIS ISSUE

A WARM WELCOME FROM CHM & HUMIN FOUNDER DR. RICHARD J. DAVIDSON


DR. RICHARD J. DAVIDSON

At the Center for Healthy Minds (CHM) and at Humin (fmr Healthy Minds Innovations, we have witnessed many pivotal moments and reached many exciting milestones in our mission to investigate, cultivate and scale wellbeing. But this moment is the most critical of our 15-year history, and my near 50 years of scientific research.

Communities and organizations are experiencing one of the most divisive, uncertain, and disorienting times in our history. As wellbeing scientists across diverse specialties, we realize that our work is more essential than ever. This report is one way to keep you informed of our developments with an 'insider look' at our discoveries, while allowing our team to remain accessible to you as we continue to scale wellbeing.

It is my genuine pleasure to invite you to experience the first edition of ***Wellbeing: Science in Action***. We hope that it will inspire you to join our unwavering quest for a kinder, wiser, and more compassionate world.

AN INVITATION FROM HUMIN CHIEF EXECUTIVE OFFICER CHRISTINA GLAVAS


CHRISTINA GLAVAS

We are living in a time of immense change—technologically, socially, and psychologically. Organizations across the globe are being asked to do more than drive performance; they're being asked to support the whole human experience. And yet, many leaders are navigating these demands without a clear compass.

At Humin, we believe wellbeing science can—and must—be that compass.

In partnership with the Center for Healthy Minds (CHM), our mission is to translate the latest neuroscience and contemplative research into practical tools that help individuals and organizations thrive. Over the past year, we've deepened our impact through innovative programs, transformative client partnerships, and a growing body of research that bridges science with real-world application.

This inaugural edition of ***Wellbeing: Science in Action*** offers a snapshot of what we're learning, what's emerging, and where we're headed. From the science of attention and emotional resilience to tools that measure workplace wellbeing in meaningful ways, we hope this digest inspires you to think differently about what's possible for you, your teams—and for humanity.

Whether you're a CEO, an HR executive, a team leader, or an impact-driven founder, our goal is to meet you where you are—with evidence-based solutions that elevate performance and wellbeing.

Thank you for being part of a growing movement toward a more conscious, resilient, and flourishing world.

Mashable

To kick off the New Year, *Mashable* published "How to Set an Intention" by Senior Reporter Rebecca Ruiz, providing practical guidance on how to create and achieve meaningful personal goals. CHM and Humin Founding Neuroscientist Dr. Richard J. Davidson contributes by explaining the importance of emotional balance and awareness in aligning actions with intentions.

Read the full article here: New Year, new goals: How to set the right intention.

FAST COMPANY

In a *Fast Company* CHM-Humin exclusive titled "How to Rewire Your Brain for Happiness," Contributing Writer Jenna Abdou covers Davidson's legacy of research and explores strategies to enhance wellbeing through training the mind. Davidson emphasizes that happiness is a skill that can be cultivated through consistent practice, much like learning a musical instrument.

Read the full article here: This is how to rewire your brain in less than a day according to a neuroscientist.

WHO WE ARE: BRIDGING SCIENCE WITH REAL WORLD IMPACT

For the past 15 years, the Center for Healthy Minds (CHM) has been dedicated to investigating the science of human flourishing. Humin (fmr Healthy Minds Innovations) was established 10 years ago to transform these valuable discoveries into tools for people across the world to cultivate and measure the skills for wellbeing. Today, this one of a kind strategic alliance for wellbeing science allows us to have an even greater impact on human flourishing.

We are:

Center for healthyminds, University of Wisconsin-Madison

humin

Our work has earned distinguished awards from the following strategic partners:

Bill & Melinda Gates foundation; Brain & Behavior Research Foundation; Chan Zuckerberg Initiative; DARPA; Fetzer Institute; Hope for Depression Research Foundation; John Templeton Foundation; Mind & Life Institute; NIH National Institutes of Health; NIJ National Institute of Justice; Omidyar Network; Templeton World Charity Foundation

THIS ISSUE'S FEATURED SCIENTISTS & CONTRIBUTORS

Dr. Richard J. Davidson
Founder & Director, CHM
Founder & President, Humin

Dr. Tammi Kral
Senior Scientist, Humin

Dr. Simon Goldberg
Counseling Psychology, Psychotherapy, CHM

Dr. Melissa Rosenkranz
Psychiatry, CHM

Dr. Matt Hirshberg
Educational Psychology, CHM

Dr. John Dunne
Contemplative Humanities, CHM

Dr. Raquel Tatar
Chief Science Officer, Humin

Dr. Cortland Dahl
Chief Contemplative Officer, Humin
Researcher, CHM

Dr. Joanna Hong
Senior Scientist, Humin

Dr. Sasha Sommerfeldt
Senior Scientist, Humin

Zishan Jiwani
Counseling Psychology PhD Student, CHM

Ivan Hernandez
Editor-in-Chief, *Wellbeing: Science-in-Action*

FROM LAB TO LIFE: THE LATEST PUBLISHED PROGRESS

USING SCIENCE TO PREDICT MINDFULNESS SKILLS

In a recent study published in ***Human Brain Mapping***, researchers at MIT, in collaboration with CHM scientists, explored how brain connectivity relates to mindfulness—the ability to stay present and focused. Using advanced brain imaging techniques, we helped analyze data from hundreds of individuals to see if specific brain patterns could predict mindfulness traits like staying aware in the moment and being non-judgmental. The goal of this study was to understand whether mindfulness is linked to the way different brain regions communicate.

HUMAN BRAIN MAPPING

Influence Series

RESEARCH ARTICLE | Open Access

Connectome-Based Predictive Modeling of Trait Mindfulness

Isaac N. Treves, Aaron Kucyi, Madelynn Park, Tammi R. A. Kral, Simon B. Goldberg, Richard J. Davidson, Melissa Rosenkranz, Susan Whitfield-Gabrieli, John D. E. Gabrieli

First published: 08 January 2025 | https://doi.org/10.1002/hbm.70123 | Citations: 1

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This research was conducted at Building 46-4037, 43 Vassar Street, Cambridge, MA 02139.

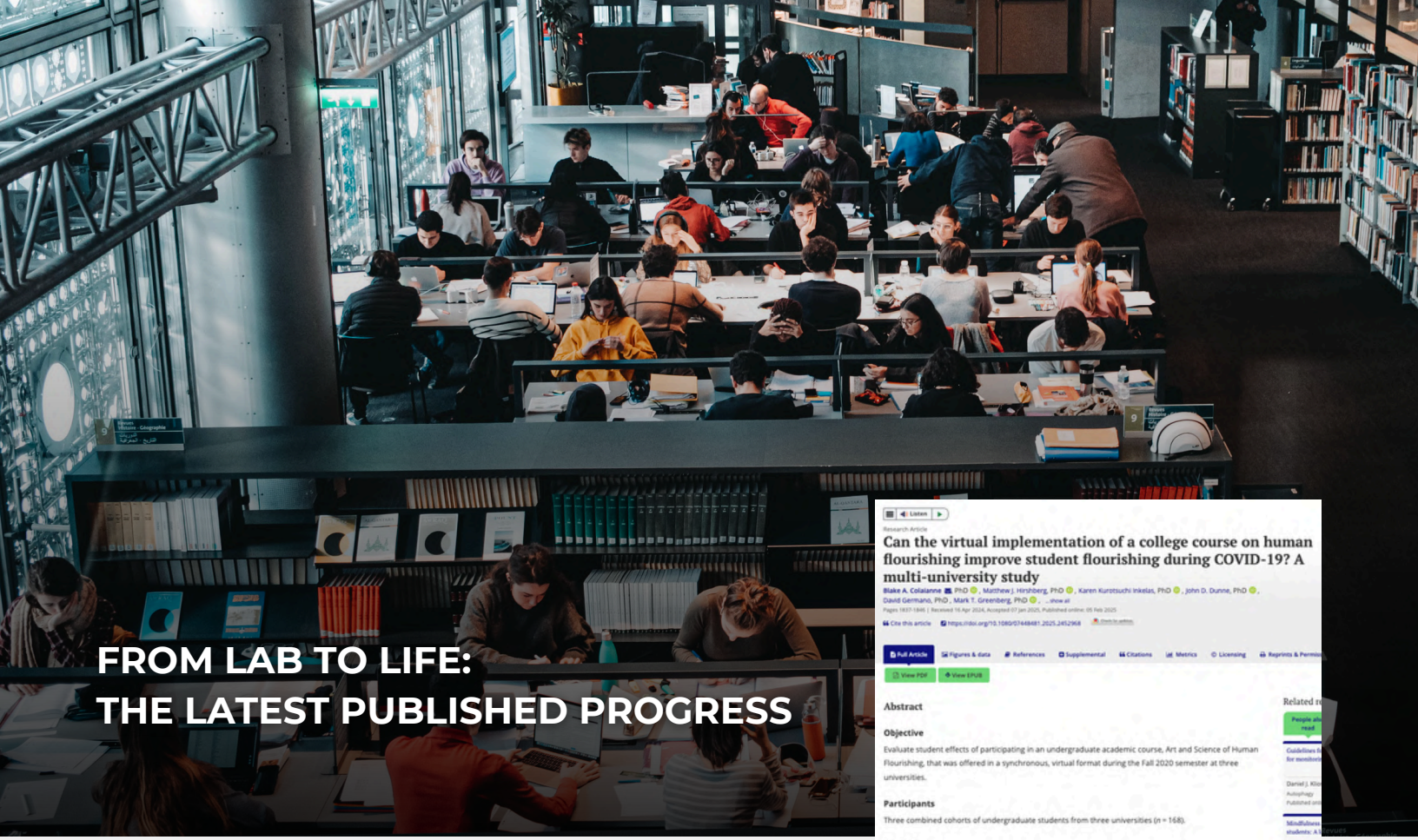
SECTIONS PDF TOOLS SHARE

ABSTRACT

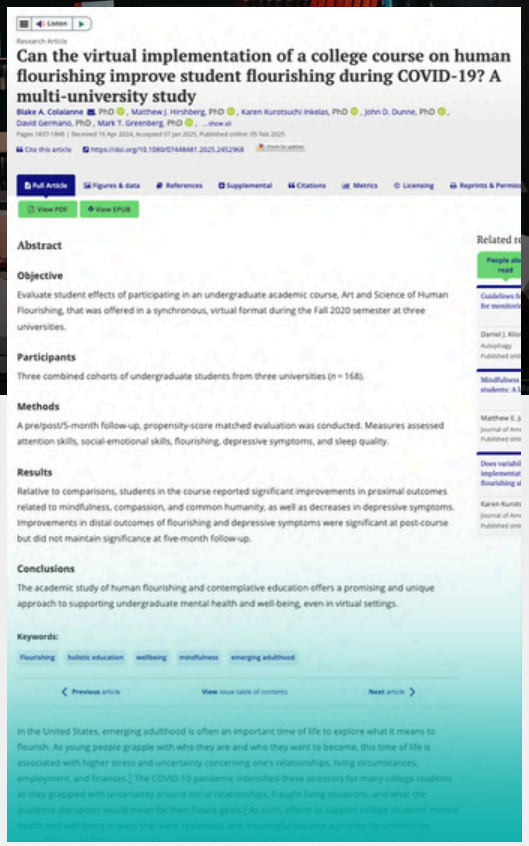
Trait mindfulness refers to one's disposition or tendency to pay attention to their experiences in the present moment, in a non-judgmental and accepting way. Trait mindfulness has been robustly associated with positive mental health outcomes, but its neural underpinnings are poorly understood. Prior resting-state fMRI studies have associated trait mindfulness with within- and between-network connectivity of the default-mode (DMN), fronto-parietal (FPN), and salience networks. However, it is unclear how generalizable the findings are, how they relate to different components of trait mindfulness, and how other networks and brain areas may be involved. To address these gaps, we conducted the largest resting-state fMRI study of trait mindfulness to-date, consisting of a pre-registered connectome-based predictive modeling analysis in 367 meditation-naïve adults across three samples collected at different sites. In the model-training dataset, we did not find connections that predicted overall trait mindfulness, but we identified neural models of two mindfulness subscales, *Acting with Awareness* and *Non-judging*. Models included both positive networks (sets of pairwise connections that positively predicted mindfulness with increasing connectivity) and negative networks, which showed the inverse relationship. The *Acting with Awareness* and *Non-judging* positive network models showed distinct network representations involving FPN and DMN, respectively. The negative network models, which overlapped significantly across subscales, involved connections across the whole brain with prominent involvement of somatomotor, visual and DMN networks. Only the negative networks generalized to predict subscale scores out-of-sample, and not across both test datasets. Predictions from both models were also negatively correlated with predictions from a well-established mind-wandering connectome model. We present preliminary neural evidence for a generalizable connectivity models of trait mindfulness based on specific affective and cognitive facets. However, the incomplete generalization of the models across all sites and scanners, limited stability of the models, as well as the substantial overlap between the models, underscores the difficulty of finding robust brain markers

The findings showed that while there wasn't a single brain pattern that defined mindfulness, certain connections stood out. People who had lower activity in brain areas tied to mind-wandering and sensory processing tended to score higher in specific mindfulness traits of acting with awareness and non-judgment of inner experience (i.e., one's feelings and emotions). This suggests that a less distracted brain may support greater awareness and emotional acceptance. However, differences across study locations highlight that mindfulness is shaped by more than just brain connectivity—it's also likely influenced by personal experiences and other brain and body systems.

Read the full publication: Connectome-based predictive modeling of trait mindfulness. Supporting CHM authors: Tammi R. A. Kral, Simon B. Goldberg, Richard J. Davidson, Melissa Rosenkranz.



FROM LAB TO LIFE: THE LATEST PUBLISHED PROGRESS


Can the virtual implementation of a college course on human flourishing improve student flourishing during COVID-19? A multi-university study

Abstract

Objective

Evaluate student effects of participating in an undergraduate academic course, Art and Science of Human Flourishing, that was offered in a synchronous, virtual format during the Fall 2020 semester at three universities.

Participants

Three combined cohorts of undergraduate students from three universities (n = 168).

Methods

A pre/post/5-month follow-up, propensity-score matched evaluation was conducted. Measures assessed attention skills, social-emotional skills, flourishing, depressive symptoms, and sleep quality.

Results

Relative to comparisons, students in the course reported significant improvements in proximal outcomes related to mindfulness, compassion, and common humanity, as well as decreases in depressive symptoms. Improvements in distal outcomes of flourishing and depressive symptoms were significant at post-course but did not maintain significance at five-month follow-up.

Conclusions

The academic study of human flourishing and contemplative education offers a promising and unique approach to supporting undergraduate mental health and well-being, even in virtual settings.

Keywords:

HOW A VIRTUAL COURSE ON HUMAN FLOURISHING CAN BOOST STUDENT WELLBEING

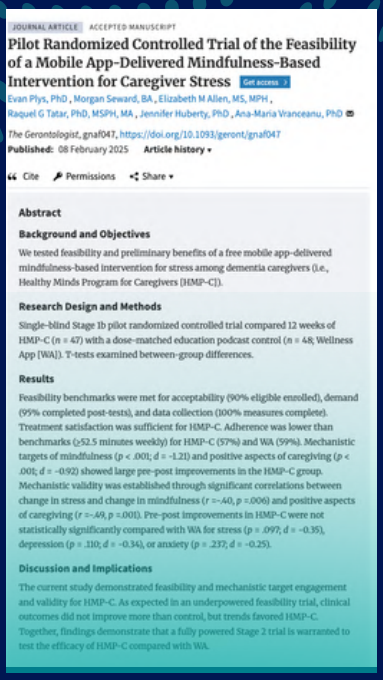
In a recent study published in the ***Journal of American College Health***, experts from the Pennsylvania State University, University of Virginia, and the University of Wisconsin–Madison, including our scientists at CHM, evaluated the impact of the Art and Science of Human Flourishing (ASHF) course, delivered virtually during the Fall 2020 semester across the universities.

The study involved undergraduate students and employed a pre/post/five-month follow-up design with propensity-score matching. Findings revealed that, compared to control groups, students who participated in the ASHF course experienced significant improvements in attention function, mindfulness, compassion towards roommates, and a sense of common humanity. Additionally, there were notable reductions in depressive symptoms and severe depression at post-course assessment. However, these benefits were not statistically significant at the five-month follow-up, suggesting the need for ongoing support to sustain wellbeing gains.

Read the full publication: Can the virtual implementation of a college course on human flourishing improve student flourishing during COVID-19? A multi-university study. Supporting CHM authors: Matthew J. Hirshberg, John D. Dunne, Richard J. Davidson.

FROM LAB TO LIFE: THE LATEST PUBLISHED PROGRESS

HOW A SCIENCE-BACKED MOBILE APP CAN EASE CAREGIVER BURNOUT


JOURNAL ARTICLE ACCEPTED MANUSCRIPT

Pilot Randomized Controlled Trial of the Feasibility of a Mobile App-Delivered Mindfulness-Based Intervention for Caregiver Stress Get access

Evan Plys, PhD , Morgan Seward, BA , Elizabeth M Allen, MS, MPH , Raquel G Tatar, PhD, MSPH, MA , Jennifer Huberty, PhD , Ana-Maria Vranceanu, PhD

The Gerontologist, gnaf047, https://doi.org/10.1093/geront/gnaf047

Published: 08 February 2025 **Article history**

Cite Permissions Share

Abstract

Background and Objectives

We tested feasibility and preliminary benefits of a free mobile app-delivered mindfulness-based intervention for stress among dementia caregivers (i.e., Healthy Minds Program for Caregivers [HMP-C]).

Research Design and Methods

Single-blind Stage Ib pilot randomized controlled trial compared 12 weeks of HMP-C (n = 47) with a dose-matched education podcast control (n = 48; Wellness App [WA]). T-tests examined between-group differences.

Results

Feasibility benchmarks were met for acceptability (90% eligible enrolled), demand (95% completed post-tests), and data collection (100% measures complete). Treatment satisfaction was sufficient for HMP-C. Adherence was lower than benchmarks (>52.5 minutes weekly) for HMP-C (57%) and WA (59%). Mechanistic targets of mindfulness ($p < .001$; d = -1.21) and positive aspects of caregiving ($p < .001$; d = -0.92) showed large pre-post improvements in the HMP-C group. Mechanistic validity was established through significant correlations between change in stress and change in mindfulness (r =-.40, p =.006) and positive aspects of caregiving (r =-.49, p =.001). Pre-post improvements in HMP-C were not statistically significantly compared with WA for stress (p = .097; d = -0.35), depression (p = .110; d = -0.34), or anxiety (p = .237; d = -0.25).

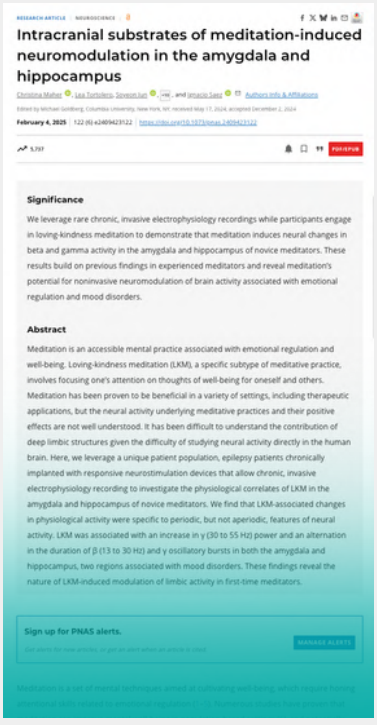
Discussion and Implications

The current study demonstrated feasibility and mechanistic target engagement and validity for HMP-C. As expected in an underpowered feasibility trial, clinical outcomes did not improve more than control, but trends favored HMP-C. Together, findings demonstrate that a fully powered Stage 2 trial is warranted to test the efficacy of HMP-C compared with WA.

In a recent study published in ***The Gerontologist***, we examined whether a slightly adapted version of the Healthy Minds Program app for Caregivers (HMP-C) would be helpful and engaging for adults caring for elderly adults with dementia. Although this was a small sample study, results were promising. Participants reported the app was easy to use and fit into their schedules, and reported increases in mindfulness and positive aspects of caregiving after 12 weeks of use, when compared to a control group. These data are currently being used for grant submissions to enroll a much larger sample to more fully examine ways to engage with and improve outcomes for caregivers across all specialties and communities.

Read the full publication: Pilot randomized controlled trial of the feasibility of a mobile app-delivered mindfulness-based intervention for caregiver stress. Featured Humin author: Raquel G. Tatar.

HOW MEDITATION CAN REWIRE EMOTIONAL CENTERS IN THE BRAIN


RESEARCH ARTICLE NEUROSCIENCE

Intracranial substrates of meditation-induced neuromodulation in the amygdala and hippocampus

Christina Maher , Lea Tortolero, Soyeon Jun , ... , and Ignacio Saez Authors Info & Affiliations

Edited by Michael Goldberg, Columbia University, New York, NY; received May 17, 2024; accepted December 2, 2024

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Significance

We leverage rare chronic, invasive electrophysiology recordings while participants engage in loving-kindness meditation to demonstrate that meditation induces neural changes in beta and gamma activity in the amygdala and hippocampus of novice meditators. These results build on previous findings in experienced meditators and reveal meditation's potential for noninvasive neuromodulation of brain activity associated with emotional regulation and mood disorders.

Abstract

Meditation is an accessible mental practice associated with emotional regulation and well-being. Loving-kindness meditation (LKM), a specific subtype of meditative practice, involves focusing one's attention on thoughts of well-being for oneself and others. Meditation has been proven to be beneficial in a variety of settings, including therapeutic applications, but the neural activity underlying meditative practices and their positive effects are not well understood. It has been difficult to understand the contribution of deep limbic structures given the difficulty of studying neural activity directly in the human brain. Here, we leverage a unique patient population, epilepsy patients chronically implanted with responsive neurostimulation devices that allow chronic, invasive electrophysiology recording to investigate the physiological correlates of LKM in the amygdala and hippocampus of novice meditators. We find that LKM-associated changes in physiological activity were specific to periodic, but not aperiodic, features of neural activity. LKM was associated with an increase in γ (30 to 55 Hz) power and an alternation in the duration of β (13 to 30 Hz) and γ oscillatory bursts in both the amygdala and hippocampus, two regions associated with mood disorders. These findings reveal the nature of LKM-induced modulation of limbic activity in first-time meditators.

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MANAGE ALERTS

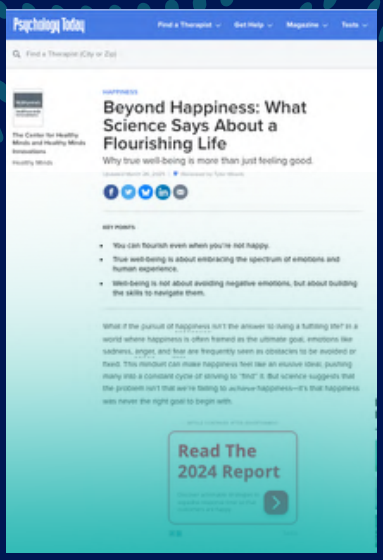
Meditation is a set of mental techniques aimed at cultivating well-being, which requires training

Researchers from the Icahn School of Medicine at Mount Sinai in New York, in collaboration with CHM and Humin Founder Dr. Richard J. Davidson, found that meditation led to changes in activity in key brain regions involved in emotional regulation and memory, using recordings from deep within the brain. From Mount Sinai's Quantitative Biometric Laboratory, the team was able to probe deeply within the brain by harnessing the opportunity to test epilepsy patients who had implanted electrodes in these deep brain regions for several weeks. The study revealed that meditation led to significant neuro-modulation in both the amygdala and hippocampus—regions central to emotion and memory. These results suggest that meditation can actively reshape neural pathways associated with emotional regulation and memory processing, offering potential strategies for enhancing mental wellbeing.

Read the full publication: Intracranial substrates of meditation-induced neuromodulation in the amygdala and hippocampus. Supporting CHM/Humin author: Richard J. Davidson.

LOOKING BACK TO LEAN FORWARD: MOMENTS OF RELEVANCE, COVERED BY SCIENCE

BEYOND HAPPINESS: WHAT SCIENCE SAYS ABOUT A FLOURISHING LIFE

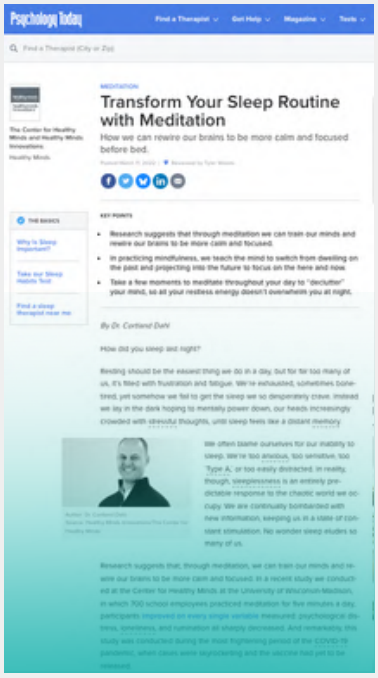


In recognition of **World Happiness Day**, Humin scientists Dr. Joanna Hong, Dr. Tammi Kral, Dr. Sasha Sommerfeldt, and Dr. Raquel Tatar, together with Dr. Richard J. Davidson released an article in ***Psychology Today*** discussing how flourishing, unlike happiness, involves long-term wellbeing, emotional resilience, and meaningful life experiences. Together, they emphasize that true flourishing is about cultivating balance, positive relationships, and a sense of purpose, not just temporary happiness. Their key message is that sustainable wellbeing comes from emotional growth and adaptability rather than the pursuit of happiness alone.

Read the full article: Beyond Happiness: What Science Says About a Flourishing Life.

Psychology Today

MEDITATION AND SLEEP: A KEY FOCUS FOR SLEEP AWARENESS MONTH



In recognition of **Sleep Awareness Month**, Humin featured its sleep meditations in the Healthy Minds Program app and encouraged its community to explore its bedtime-dedicated practices. In his previous writings on the benefits of meditation for sleep health, Research Scientist Dr. Cortland Dahl highlights the power of meditation in improving sleep quality by training the mind to be more calm and focused. Dahl describes how meditation practices help reduce mental chatter—a major barrier to restful sleep—by grounding the mind in the present moment.

A key finding from a study conducted during the pandemic showed that even five minutes of daily meditation significantly improved overall wellbeing and reduced psychological distress, loneliness, and rumination...all of which set the stage for better sleep. Participants who practiced meditation reported lower stress, underscoring the effectiveness of this approach to finding moments of sound rest in today's hectic world.

LOOKING BACK TO LEAN FORWARD: MOMENTS OF RELEVANCE, COVERED BY SCIENCE

WOMEN IN SCIENCE: CATALYSTS FOR WORKPLACE WELLBEING

BY DR. JOANNA HONG

In Observance of International Women's Day and International Women in Science Day

Scientific innovation thrives when people from diverse backgrounds collaborate. Women in science—essential contributors to research, especially in human wellbeing—enhance its quality and impact. Studies by Nielsen et al. (2017) and Campbell et al. (2013) show that mixed-gender research teams achieve higher citation rates and peer-reviewed outcomes, underscoring the value of diverse perspectives in improving scientific rigor.

Women researchers have led major advances in workplace wellbeing. Over 40 years ago, Christina Maslach developed the Maslach Burnout Inventory, a foundational tool for assessing job burnout (Maslach & Jackson, 1981). Amy Edmondson of Harvard later introduced the concept of "psychological safety," showing how trust and openness within teams drive learning and performance (Edmondson, 1999). These contributions have shaped global practices in mental health, team dynamics, and resilience-building.

Women in leadership also help translate science into workplace improvements. Hunt et al. (2018) found that companies with gender-balanced executive teams are 25% more likely to outperform less balanced ones. Women leaders foster inclusive, empathetic cultures that boost employee satisfaction, creativity, and productivity.

Women's contributions to science and leadership strengthen workplace environments. Valuing and supporting them is essential for innovation and resilience. Their insights challenge convention and advance impactful solutions—benefiting individuals, organizations, and society alike.

Learn more about the science of wellbeing in organizations at humin.org/programs-and-services/organizations.

LOOKING BACK TO LEAN FORWARD: MOMENTS OF RELEVANCE, COVERED BY SCIENCE

NEW FINDINGS CONNECT RACISM TO ALTERED INFANT BRAIN DEVELOPMENT

BY DR. TAMMI R. A. KRAL

Humin researcher Dr. Tammi Kral published an article in ***Psychology Today*** highlighting research in Scientific Reports showing that racism experienced during pregnancy can impact brain development in the next generation (Kral et al., 2024). Participants, primarily Black or African American, were part of a larger longitudinal study on social factors affecting child health and wellbeing in the first five years of life. During pregnancy, they completed surveys—including reports of their experiences of racism—as part of a project led by Dr. Sarah Short at the Center for Healthy Minds (CHM) and Dr. Cathi Propper at UNC–Chapel Hill. Researchers then collected infant brain images around two weeks after birth.

Infants of individuals who reported more frequent experiences of racism showed stronger connectivity between the amygdala and areas like the visual cortex and thalamus—regions involved in emotion, vision, and information processing. This pattern is linked to vigilance, suggesting these infants may be more sensitive and reactive to threat. Increased connectivity was also found between the hippocampus, which supports memory and emotion regulation, and areas involved in visual and spatial processing.

An excerpt from the ***Psychology Today*** article reads: “As children grow, a brain that is overly vigilant or reactive can contribute to higher risks for anxiety disorders, depression, and other behavioral challenges. As a society, we must strive to create environments where all children, regardless of race, have the opportunity to flourish in safety and well-being. These findings highlight how maternal experiences of racism have consequences that go beyond immediate mental health impacts—they can influence the next generation, beginning in the womb. This evidence adds to the growing understanding of how racism is not only a social issue but also a biological one, with tangible effects on the health and well-being of BIPOC families. Reducing racism and offering resources for coping and resilience-building are not only moral imperatives but also necessary steps to improve health outcomes for future generations.”

Read the full article: Research Shows Racism May Influence Infant Brain Development.

IN MY ELEMENT: HOW A SCIENTIST SEES THE WORLD

FROM OTHERING TO BELONGING: THE POWER OF BRIDGING IN A DIVIDED WORLD

BY DR. SASHA SOMMERFELDT

Hearing john a. powell speak on othering, belonging, and bridging in 2019 shifted my perspective over the past few years and has felt especially resonant lately. While othering dehumanizes those we see as different, belonging envisions a world where all are included. He spoke about bridging—forming connections with those we disagree with—as a necessary alternative to breaking, which excludes others through physical or social barriers.

Breaking often feels easier than bridging. Facing opposing views can stir discomfort, and in our increasingly digital lives, it's tempting to avoid that discomfort by removing a "friend," blocking accounts, or avoiding certain content. But where does that lead?

Breaking reminds me of the marshmallow test—the famous psychology experiment where kids wait to get a second marshmallow rather than take the first right away—which has come to symbolize short-term restraint for long-term reward. Similarly, avoiding difficult conversations may feel good in the moment, but it deepens societal polarization and erodes our capacity to connect across differences. How does that play out practically? The world is full of disagreement. We must learn to engage with others respectfully, listen deeply, and seek common ground. This doesn't mean compromising on core values, but recognizing that bridging is crucial if we hope to avoid repeating painful histories.

For me, bridging feels like the hardest, most meaningful part of compassion meditation in action. That practice starts by focusing goodwill toward someone we love, then to a neutral person—like a grocery clerk—and eventually to someone we find difficult. Early on, you choose someone "medium spicy," not too hard. Wishing that this person be happy, healthy, and safe from harm. powell talks about short and long bridges. Like behavior change or compassion practice, start with a low barrier. Baby steps. Who's someone you disagree with but could try to understand better? Start small, and work to strengthen that bridging muscle. What's a short bridge you could build today?

LAB CONFIDENTIAL: WHAT OUR SCIENTISTS ARE WHISPERING ABOUT

SCALING IMPACT: HOW HUMIN IS HELPING THOUSANDS OF COLLEGE STUDENTS STAY ENROLLED

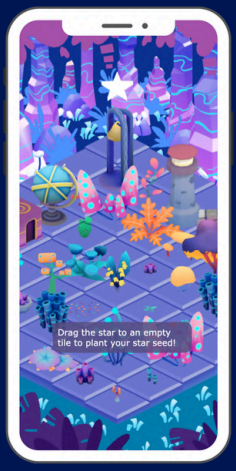
BY DR. TAMMI R. A. KRAL

Humin is supporting an upcoming research study—a "megastudy"—to boost college retention among first-year students, in collaboration with the Behavior Change for Good Initiative at the Wharton School, University of Pennsylvania, and Dr. Chad Stecher of Arizona State University. A megastudy is a large-scale field research study in which multiple smaller studies are conducted, simultaneously, with participants recruited from a common pool, and aimed at changing the same outcome. Tens of thousands of first-year college students will be recruited from across the U.S. to get either a version of the Healthy Minds Program app customized for college students, or one of eight other interventions, with the goal of increasing college retention. The study is currently in the pilot phase, with recruitment set to begin this spring (2025) and data collection will be ongoing through the 2025 to 2026 school year.

Find out more about megastudies: *Behavior Change for Good Initiative Megastudies*.

COSMIC GARDEN: A GAMIFIED APPROACH TO MEASURING TEEN WELLBEING IN REAL TIME

BY DR. TAMMI R. A. KRAL



Our team continues to advance a comprehensive mobile measures toolkit to assess teen wellbeing across the domains of awareness, connection, insight, and purpose. With support from the Chan Zuckerberg Initiative, we previously developed and tested mobile measures for each domain and validated our Healthy Minds Index in teens, which was published in PLOS One last year (Kral et al., 2024). We are now publishing a series of scientific papers detailing the development, user testing, and validation of each gamified, mobile measure of wellbeing.

The first of these papers highlights *Cosmic Garden*, a game-formatted mobile measure designed to assess all four wellbeing domains. Currently under peer review, *Cosmic Garden* uses the experience sampling method, where teens receive star "seeds" by reporting their in-the-moment wellbeing and plant them in a digital garden that grows over time. Our publication describes the game's development, user experience testing, and validation studies.

This engaging and scalable tool shows promise as a scientifically valid and enjoyable way to measure teen wellbeing.

We'll continue to cover discoveries that support wellbeing measures and resources for teens. Subscribe to our email list at humin.org for notifications on this topic.

LAB CONFIDENTIAL: WHAT OUR SCIENTISTS ARE WHISPERING ABOUT

BRIDGING INNER AND OUTER FRONTIERS: MEDITATION, PSYCHEDELICS, AND THE FUTURE OF FLOURISHING

BY DR. CORTLAND DAHL

Two of the most promising frontiers in mental health and flourishing research—contemplative practices and psychedelics—are increasingly converging. Meditation-based programs like the Healthy Minds Program app and the careful use of psychedelic compounds both show significant potential to reduce suffering and promote flourishing at scale. Recent studies, including McAlpine et al. (2024) and work from our counseling psychology colleagues at the Center for Healthy Minds, Zishan Jiwani and Simon Goldberg, highlight a growing consensus: Training the mind through meditation may significantly enhance the transformative potential of psychedelic experiences, and vice versa.

As someone deeply involved in both research and practice, I see these modalities as profoundly complementary. Psychedelics can catalyze rapid shifts in perspective and open people to radically new ways of experiencing themselves and the world. Meditation, on the other hand, develops the stability, insight, and emotional flexibility to gradually reshape our habits of thought and deepen those same insights. We're entering an exciting era of "hybrid" approaches —using meditation to prepare for, enhance, and integrate psychedelic experiences. I suspect we'll increasingly see "sandwich" models emerge: contemplative training before and after psychedelic sessions to support durable transformation grounded in daily life.

These developments represent more than just clinical tools—they offer a chance to explore the frontiers of human consciousness in a way that is safe, systematic, and rooted in centuries of contemplative wisdom. At Humin and CHM, we're excited to be contributing to this exploration with rigorous science and real-world applications that expand what it means to flourish.

Read the full publication: *Can psychedelic use benefit meditation practice? Examining individual, psychedelic, and meditation-related factors*. Featured CHM authors: Zishan Jiwani, Simon B. Goldberg.

In recognition of wellbeing observance moments, including Mental Health Awareness Month and PTSD Awareness Month, we'll continue to cover this study. Subscribe to our email list at humin.org for notifications on this topic and more.

THANK YOU FOR REVIEWING OUR REPORT

At Humin, we're proud to debut ***Wellbeing: Science in Action***—your go-to, exclusive guide for developments in the science of wellbeing. By providing you with this comprehensive, periodic summary of our progress, we hope you'll find inspiration to prioritize the holistic wellbeing of your organization—from that of your employees and customers to your company's overall performance.

HUMIN IS BUILT TO TRANSFORM ORGANIZATIONS THROUGH REAL SCIENCE

Humin is a global pioneer in applying the science of wellbeing, made possible through our strategic alliance with the Center for Healthy Minds (CHM) and the legacy research of renowned neuroscientist Dr. Richard J. Davidson.

Backed by 50 years of groundbreaking research and community trust, our alliance has delivered over 200 peer-reviewed outcomes, earned 100+ distinguished awards and partnerships, and helped more than 1 million people across 140 countries to learn the skills for wellbeing. Recognized by the World Economic Forum, *TIME*, *The New York Times*, and CNN, our nonprofit builds products and provides services that drive lasting impact worldwide.

CONTACT OUR SERVICES TEAM

Humin Wellbeing Science Services
humin.org/programs-and-services/organizations
wbss@humin.org