

Wellbeing

SCIENCE IN ACTION

*A New Scientific Study
by Humin Measures the Wellbeing
Impact of Immersive Retreats at
Miraval Resorts & Spas*



humin + M/RAVAL



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Wellbeing Science: Miraval and the Guest Experience



Simon Marxer
VP Spa & Wellbeing,
Miraval Resorts & Spas

A FEW YEARS AGO, DURING A CONVERSATION ABOUT Miraval's growth, someone asked me, "How do you define its benefits?" Despite my deep connection to the brand, the question felt surprisingly complex. I finally replied with another question: "How does one define the benefits of friendship or the feeling of warmth?"

This exchange revealed a challenge: if those of us closest to Miraval struggle to describe its impact, how can we share its story with those new to it? Over nearly two decades here, I have seen its transformative influence for guests who have deeply personal experiences that resist simple labels or lists of rewards.

So, what are the benefits Miraval offers? They are best understood as a journey of discovery and inspiration. Miraval creates a supportive environment where guests can navigate their own path to wellbeing by exploring their curiosity and capacity for growth. Through movement, soothing treatments, thoughtful inquiry, and soul-searching, we invite them to go a little deeper. Some arrive with clear goals; others come to define them and welcome the unexpected insights that emerge.

The Miraval experience is designed to help people shift habits and strengthen relationships with themselves, their loved ones, their communities, and nature. It is an organic fusion of outdoor adventures and quiet internal moments that transforms how people value and view wellbeing; some even describe this process as transcendent.

Wellbeing is not a solitary pursuit; it is shaped by collective experiences and supportive partnerships. While each guest's journey is unique, sharing moments of personal meaning often amplifies their sense of purpose and presence. This creates a kind of alchemy I have yet to find anywhere else and forms the heart of the Miraval experience.

As the wellness industry grows more crowded, we have recognized the need to evolve and clarify Miraval's mission: creating balance through mindfulness in an ever-changing world. To do this, we set out to explore the scientific drivers of that beating heart.

Remaining accountable to our mission and brand promise, we embraced an evidence-based study with scientists at Humin, a global nonprofit leader in wellbeing science, to examine Miraval's influence on guests' wellbeing. This study included a broad range of participants. With a humble and curious approach, we set out to better understand Miraval's impact and value.

Grounded in empirical evidence, we have found solid answers that complement and quantify the emotional and instinctive responses to questions about tangible benefits. Our commitment to ongoing learning and adaptation honors the complexity and individuality of each guest's experience. It reinforces Miraval's leadership in nurturing transformative wellbeing for all who walk through our doors.

The Miraval Effect: Using Science to Verify Results of Wellbeing Retreats

IN A WORLD WHERE BOLD CLAIMS SATURATE THE wellness industry, science serves as a critical filter.

Science provides organizations with evidence for making reality-based, strategic decisions, and it gives customers confidence to invest in experiences that deliver meaningful, measurable benefits.

This collaboration between Humin and Miraval represents a rare commitment: applying the rigor of wellbeing science to a luxury retreat environment.

We set out to ask a foundational question: Do immersive wellness retreats genuinely improve wellbeing, and do those benefits last? We selected scientific measures that support the outcomes Miraval aims to cultivate for their guests: reduced stress, increased mindfulness, and improved overall wellbeing. We also included dimensions uniquely relevant to the Miraval experience, such as emotional safety, a sense of community, and authenticity of colleague interactions—to understand the deeper mechanisms driving personal growth.

Miraval's leadership demonstrated care and curiosity in allowing the science to speak for itself. As a scientist, I balanced my expectations with more than a decade of conducting research, where the frequent outcome has mixed results. Science is ultimately about seeking understanding and testing whether the data align with what we believe to be true. What this study revealed exceeded our expectations.



Dr. Tammi Kral, PhD
Director of Science, Humin

We observed significant improvements not only in perceived stress, but across multiple dimensions that support long-term resilience. Guests reported measurable gains in mindfulness, wellbeing, and the foundational skills at the heart of Humin's ACIP framework: awareness, connection, insight, and purpose.

The results of our research validate the Miraval experience as one with measurable benefits to wellbeing, many lasting 60 days beyond the stay. The data also revealed a compelling nuance: Guests who stayed longer experienced higher levels of community, belonging, and emotional safety.

Through this research, we have gained a greater understanding of how the wellness experiences at Miraval Resorts positively impact wellbeing and the value of applying scientific processes when assessing them. Wellbeing science gives organizations a way to understand how their products and services affect real people in real time.

The implications extend far beyond hospitality. Organizations that take a person-centered, science-based approach will emerge as industry leaders. When we use science to understand and elevate the human experience, we create the conditions for people, organizations, and communities to thrive.

Voices from the Study

My experience was *“special, I was able to reconnect with myself in a way that I have never done before on a trip.”*

My experience was *“life-changing and I am already incorporating my learnings into my day-to-day life.”*

I learned *“how much I love myself, how much progress I’ve made in my healing journey, that disconnecting from my phone is an amazing practice I need to continue.”*

I learned that *“I do not need others’ approval or understanding in order to follow my path, [and] I need to actively focus on self-care outside of Miraval visits.”*

I learned *“that one night away is greater than 8 nights [dining] out for reconnection to my partner and my purpose. Silence, movement, and actively listening to my environment and body are healing.”*

I learned that *“I am capable of learning new things and approaching problems in a creative way.”*

Executive Summary

AMONG THE FIRST OF ITS KIND, THIS RESEARCH PROVES THAT retreats can go beyond offering temporary relief by redistributing the costs of burnout toward building strategies that reduce it.

The Miraval Wellbeing Study, led by researchers at Humin (formerly Healthy Minds Innovations), is the first scientific measurement of the guest experience at Miraval. Results show that even a short, immersive stay at a Miraval resort produces measurable improvements in perceived stress, resilience, and belonging, leading to an increased sense of wellbeing.

- **Lasting Impact on Perceived Stress:** The majority of surveyed Miraval guests reported reduced perceived stress levels post-stay, with 62% of the sample asserting they experienced benefits lasting 60 days post-stay.
- **Improved Resilience:** Guests who participated in the study reported gaining skills linked to resilience, including mindfulness, compassion, awareness, purpose, and self-efficacy.
- **Increased Sense of Belonging:** 95% of guests reported a sense of belonging, and over 70% formed new friendships, amplifying wellbeing outcomes.
- **Enhanced Overall Wellbeing:** Data revealed that equine experiences, outdoor adventure, creative expression, and meditation were among the most impactful practices, driving improvements across multiple dimensions of wellbeing.

This study demonstrates how immersive wellness retreats go far beyond the typically perceived “indulgent experience.” They offer an alternative to today’s always-on culture by providing measurable wellbeing benefits. For individuals, it’s a charging reset. For corporations, it represents a new ROI in wellbeing and resilience.

“By embedding wellbeing science into how organizations design and evaluate their offerings, we help leaders turn personal wellness into a strategic advantage. Our work enables businesses to deliver experiences that measurably improve wellbeing while driving long-term value for customers, employees, and organizations.”



Christina Glavas
Humin CEO



Why Wellbeing Matters Today More Than Ever

BURNOUT HAS REACHED unprecedented levels, resulting in an estimated annual loss of USD 322 billion in productivity worldwide (WHO, Deloitte). Traditional wellness programs often deliver short-lived benefits. This study of Miraval Resorts & Spas, led by Humin, offers a revelation: immersive wellness experiences can not only alleviate perceived stress but can also foster the development of skills for long-term wellbeing and an ongoing reduction of burnout.

The importance of this is reflected in the expansion of the global wellness tourism industry, which achieved nearly USD 995 billion in 2024 and is projected to more than double by 2034 (Global Market Insights). Within this sector, wellness retreats (from yoga sanctuaries to meditation centers) are expected to exceed USD 370 billion by 2034. Similarly, the global wellness hotel segment was valued at USD 16.8 billion in 2024, and anticipates more

than 8% annual growth through 2033 (Global Growth Insights). Consequently, thousands of retreats and resorts worldwide are now competing to attract travelers seeking wellness, restoration, and purpose during their time away.

Despite the sector's growth, a fundamental question persists: Do these wellness experiences produce tangible results? While many retreats claim transformative outcomes, the scientific evidence remains inconsistent. A systematic review of residential retreat experiences noted benefits such as reduced perceived stress, improved lifestyle, and psychological enhancement, but also highlighted limitations, especially wide methodological variation (Naidoo et al., 2018). Many guests report immediate post-retreat improvements, yet there is limited evidence of sustained benefits. This absence of measurable, lasting outcomes leaves both consumers and the industry without definitive standards of effectiveness.

By using rigorous scientific methods through Humin's research framework, the study provides something rare in hospitality: evidence of lasting change.

The Miraval Wellbeing Study seeks to address this gap. By adopting rigorous scientific methodologies within Humin's research framework, the study offers rare and credible evidence of enduring change in the hospitality sector. In doing so, it positions immersive wellness experiences as strategic investments with measurable returns for individuals, corporations, and the global hospitality industry seeking to differentiate in an era when wellbeing is an essential, not optional, priority.



Study Methodology

This methodology outlines how the study was designed, who participated, and how wellbeing outcomes were measured over time to understand both guest outcomes and the role of the Miraval experience.



Qualitative Interviews

Discussions with Miraval colleagues and leadership informed the study design and measurement approach.



Sample Size

266 guests enrolled in the study and completed a pre-stay survey. Of those participants, 176 guests completed both the two-week and 60-day post-stay follow-up surveys.



Design

A multi-timepoint, longitudinal study was designed to assess changes over time. Guest wellbeing was measured at three points: pre-stay (baseline), two weeks after departure, and 60 days post-stay.



Pre/Post Measures

Guest wellbeing was assessed using a combination of validated measures, including Humin's science-based ACIP framework: Awareness, Connection, Insight, and Purpose (Dahl, Wilson-Mendenhall & Davidson, 2020, PNAS).



Resort Experience Measures

The study examined guest perceptions of community, emotional vulnerability, shared activities, and interactions with Miraval colleagues to better understand the role of the on-property experience.

Key Results

1 Perceived Stress Reduction: A Measurable Release Valve

The majority of surveyed Miraval guests reported a decrease in perceived stress. Fewer participants met the threshold for “high stress” after their stay, indicating not only a shift in averages but a meaningful reduction in severe stress.



Surveyed guests self-reported feeling less stressed, with **62%** of those who participated in the observational, longitudinal study perceiving a reduction in stress lasting 60 days post-departure.

To put this in perspective, a well-known study found that a six-day mindfulness program reduced stress by 13% (footnote). Miraval’s results matched or even surpassed that level of improvement.



2 Wellbeing: Key Indicators of Wellbeing

Surveyed guests reported broad improvements across Humin’s ACIP framework (Awareness, Connection, Insight, and Purpose), with gains persisting at the 60-day follow-up:



Awareness – Guests described being more attentive, focused, and present in daily life. People felt more present when they described their experiences and observed their surroundings without judgment.



Connection – Guests who shared meaningful experiences with others, made new friends, and felt supported by Miraval colleagues reported larger gains in interpersonal skills related to connection.



Insight – Guests reported deeper self-awareness and an enhanced ability to understand links between their thoughts, feelings, and behaviors.



Purpose – Guests left with stronger clarity around their values and sense of meaning in life, aligning intentions with action.

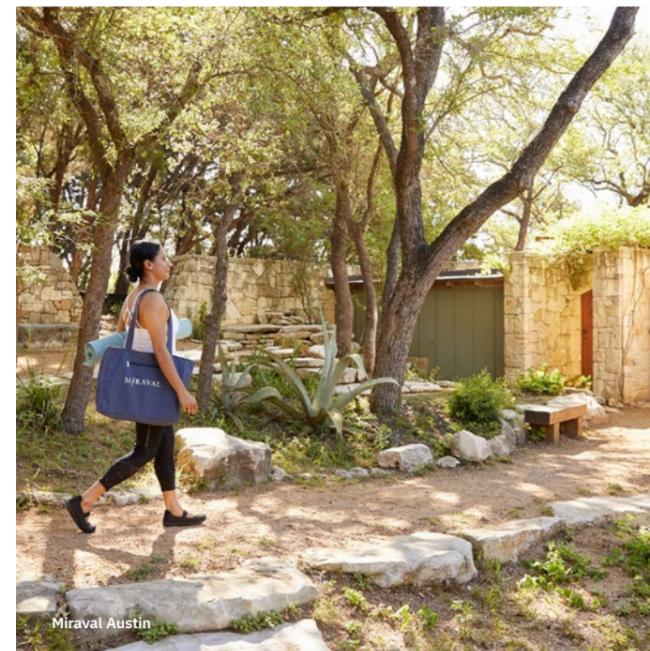
3 Mindfulness: Building Ongoing Resilience

Enhanced mindfulness capacities improved significantly across multiple domains.

Surveyed guests reported:

- **Non-Reactivity to Inner Experience** – Being less likely to feel overwhelmed or hijacked by emotions.
- **Acting with Awareness** – A stronger ability to be intentional in daily choices.
- **Describing Experiences** – Improved ability to label and communicate their inner states.

At the 60-day follow-up, new improvements were observed in non-judging inner experience, indicating the development of sustained resilience after leaving a Miraval property.



Surveyed guests who felt a sense of belonging, emotional vulnerability, and part of a community experienced the greatest improvements in enhanced mindfulness, underscoring the role of social context in personal growth.

4 Self-Efficacy and Job Satisfaction

Surveyed Miraval guests demonstrated significant increases in self-efficacy, or the belief in their ability to accomplish goals and overcome challenges. Guests frequently described realizations such as: “I need to slow down, breathe, and set up boundaries,” and “I re-grounded on what’s important.” and “I learned to give myself more grace.”

Job satisfaction also increased in the weeks following a Miraval stay, with surveyed guests reporting higher contentment in their careers.

Following a Miraval Stay, Surveyed Guests Reported



Improved Self-Efficacy

In response to the statement, “When I face difficult tasks, I am certain that I will accomplish them.”*

Guests reported **larger gains in self-efficacy**. Gains were amplified when they:

- Felt a stronger sense of **community**
- Attended **in-depth workshops**
- Had a private 1 : 1 session with a **Miraval specialist**



Improved Job Satisfaction

In response to the survey question, “In general, how satisfied are you with your job?”

Guests reported higher **job satisfaction** after their stay.

*P<0.05

*EXAMPLE ITEM TAKEN FROM THE NEW GENERAL SELF-EFFICACY SCALE. **P< 0.05

5 The Power of Community and Belonging

Community emerged as a central driver of wellbeing, with 95% of surveyed guests reporting a strong sense of community at Miraval.

Guests with a higher sense of community experienced:

- Greater perceived reductions in stress
- Stronger improvements in wellbeing and mindfulness
- Increases in social behaviors, such as compassion and generosity

Over 70% of guests formed new friendships during their stay.



6 Transformative Activities

Certain activities emerged as especially impactful:

- **Equine programs** were associated with the broadest improvements across stress, wellbeing, mindfulness, and self-efficacy. This was a strong indication that guests found this activity type to be transformative.



- **Meditation classes** contributed significantly to reduced perceived stress and improved wellbeing, reinforcing decades of evidence for contemplative practice.
- **Creative Expression and Outdoor Adventure** experiences contributed to amplified feelings of community, authenticity, and belonging, which in turn supported deeper personal growth.

Guests who tried a new activity during their stay saw larger improvements in perceived stress reduction, confidence, and self-awareness, underscoring the power of novelty and challenge in driving growth.



Miraval Equine Offerings

MIRAVAL'S EQUINE PROGRAMS HAVE BEEN A CORNERSTONE OF THE guest experience, offering a unique pathway to self-awareness, personal growth, and mindful presence. Rooted in trust, guided interaction, and intentional engagement, these sessions are available across all Miraval.

Horses are extraordinary beings, and connecting with them provides a profound way to reconnect with life's natural flow. Guided by equine specialists, guests develop a bond with gentle, intuitive horses, observing how they respond to intention as a subtle yet powerful mirror of their personal energy and behavior.

A signature offering within Miraval's wellness portfolio, the Equine Experience equips guests with tools for leadership, cooperation, and self-regulation, all through meaningful, non-verbal interaction with these remarkable animals.

Equine Activity Effects

Participating in an equine activity was associated with increased benefits to wellbeing across most categories.

Guests who took equine classes reported **larger improvements*** in

- Perceived stress reduction
- Wellbeing
- Mindfulness skills

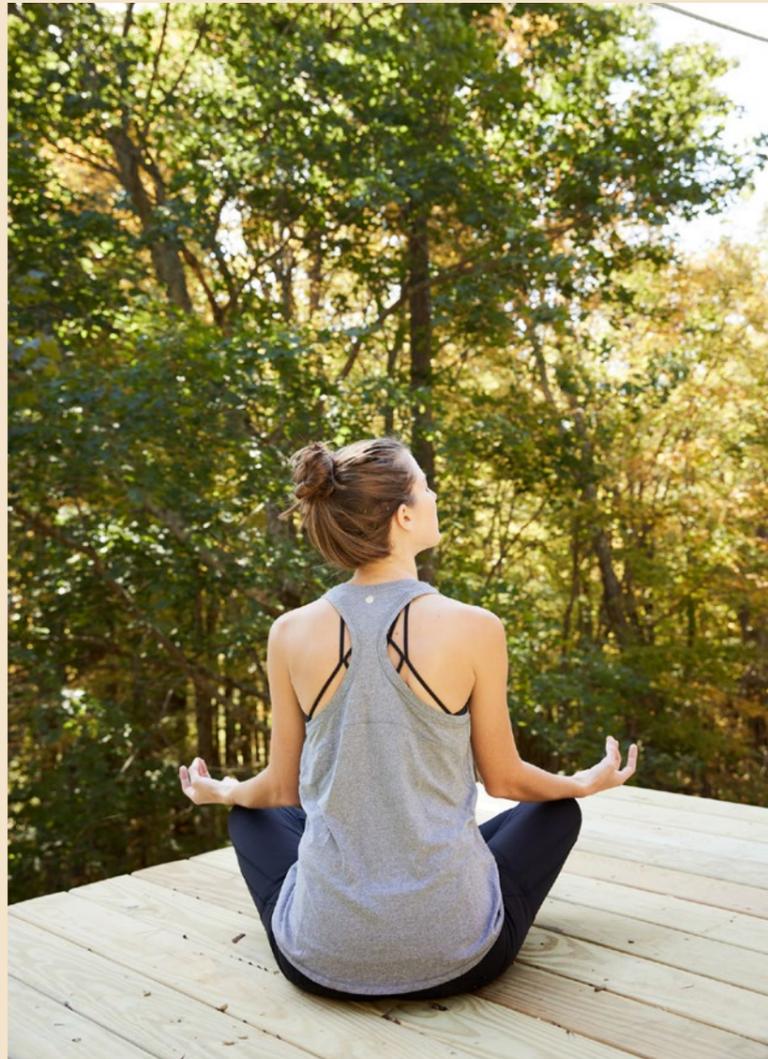
*P<.05



Miraval Creative Expression Offerings

CREATIVE EXPRESSION OFFERINGS AT MIRAVAL invite guests to explore mindfulness through the act of making. These guided sessions use art, music, and movement to foster presence, emotional exploration, and sensory awareness.

No artistic background is required, only curiosity. Each experience emphasizes process over product, using creative practice as a means of self-reflection and balance.



Miraval Meditation Offerings

MEDITATION CREATES A SPACE OF PEACE WITH a clear awareness of the present moment. In this state of consciousness, the body rests deeply; the mind, though quiet, is awake. In the silence of awareness, the mind releases old patterns of thinking and feeling and learns to rest. People meditate to address issues ranging from physical imbalances and burnout to emotional blocks and cognitive chaos. It's a powerful tool for restoring balance.

Miraval's meditation offerings provide a way to open the mind, release negativity, gain insights, and achieve a deeper sense of peace and calm. Practicing meditation can help people notice what surrounds them and what is inside the self.

Mindfulness is about being in the moment, but it is also about accurately perceiving a sense of awareness. Meditation can help with this process by cultivating calm and clarity through guided practices that ground guests in the present moment.



Miraval Outdoor Adventure Offerings

OUTDOOR ADVENTURE EXPERIENCES AT MIRAVAL transform physical activity into a mindful practice of courage, trust, and presence. These guided programs invite guests to explore the intersection of body and mind through movement, balance, and controlled risk-taking, all within a framework of emotional safety and self-discovery.

Each experience is intentionally designed to cultivate resilience, awareness, and trust, both in oneself and others. By connecting with the natural world and collaborating in team-assisted challenges, participants expand the boundaries of what they believe possible, discovering that growth often begins just beyond the edge of comfort.





Real-Life Benefits of Wellbeing Retreats

“This study reinforces what our guests have shared with us for more than 30 years, that time spent at Miraval can have a meaningful and lasting impact on their overall sense of wellbeing. It represents an important step forward for our industry, demonstrating how thoughtfully designed hospitality experiences can support connection, balance, and personal growth in today’s world.”



Mark Stebbings,
Miraval Arizona,
General Manager

A Scientifically Smart Investment

What are the benefits?

The study suggests that Miraval’s immersive wellness retreats are positively correlated with reduced perceived stress, strengthened mindfulness, and wellbeing benefits lasting even months after a stay.

Who are the beneficiaries?

- **Organizations & Companies.** Leaders can use these findings to create evidence-based wellbeing programs that increase ROI for employees and their organizations.
- **Individuals.** This study reframes retreats as more than leisure—they are investments in resilience, purpose, and thriving.



Organizations & Companies

Quantifying the Impact

- **Impact for Clients and Guests:** By measuring the benefits of wellbeing for clients and guests, teams can drive business outcomes from a foundation of scientific studies.
- **The Power of Science:** The novel use of scientific wellbeing measurement tools enables almost any organization to assess different aspects of its operations and offerings through a new lens.
- **Measurable Progress:** Quantifying the impact of products, services, and wellbeing offerings can help organizations improve efficiency and effectiveness.
- **Workplace Wellbeing:** Resilience, community, authenticity of interactions, and belonging can offer a blueprint for healthier corporate cultures.



Individuals

The Ripple Effect

- **Impact for Individuals:** This study redefines retreats as more than leisurely getaways; they are investments in personal wellbeing.
- **Tangible Benefits:** Surveyed guests reported a reduced perception of stress, stronger levels of mindfulness, higher self-efficacy, and improved wellbeing sustained beyond their stay.
- **Personal ROI:** With compounding benefits per night, guests maximized returns by extending their stays. Traveling or interacting with others on-site further improved interpersonal outcomes.
- **Life-Changing Realizations:** Surveyed guests shared statements ranging from “I can be comfortable being alone” to “Play can help me when I feel overwhelmed.” The insights they gained at Miraval rippled outward, enhancing overall wellbeing.



Scientific Support for Wellness-Focused Retreats

The Miraval Wellbeing Study confirms what many guests have felt intuitively: a stay at a Miraval property is not just restorative, it is transformative. By combining evidence-based practices, expert facilitation, and authentic communities, Miraval delivers wellbeing outcomes that extend far beyond the retreat itself.

Miraval is a pioneer in applying science to measuring the impact of wellness-based retreats.

In a world where stress, disconnection, and burnout erode long-term wellness, the study offers a new blueprint for measuring wellbeing that improves with a Miraval stay and lasts beyond it.

By combining evidence-based practices, expert facilitation, and authentic communities, Miraval delivers wellbeing outcomes that extend far beyond the retreat itself.



MIRAVAL.

Mindfulness Retreats

Since 1995, Miraval Resorts & Spas has offered unique, experiential wellbeing journeys and innovative spa treatments. Its core is mindfulness, and its motto, “life is better when in balance,” guides each visit in Arizona, Texas, Massachusetts, California, and Saudi Arabia. To explore the Miraval experiences featured herein, which contributed to the guest results in this study by Humin, visit miravalresorts.com.



Wellbeing Science

Humin helps organizations apply cutting-edge science to unlock performance, resilience, and human potential. Our solutions bring scalable, measurable flourishing to products, workplaces, and communities, making wellbeing possible for everyone, everywhere. Explore more at humin.org.

A Wellbeing Science Case Study in Hospitality



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