Employees Wellbeing and Yoga. The Case of the Museum of Asian Art Staff

Maria Elide Vanutelli[2], Annalisa Banzi[1] and Claudio Lucchiari[1,*]

[1]*Department of Philosophy "Piero Martinetti", Università degli Studi di Milano, Milan, Italy*

[2]*Department of Psychology, University of Milan-Bicocca, Milan, Italy*

Abstract: Museums are increasingly recognized not only as cultural and educational institutions but also as environments that foster wellbeing. While many initiatives focus on visitor wellness, far less attention has been given to the wellbeing of museum staff, who often experience stress despite working in culturally enriched settings. The ASBA project addresses this gap by introducing chair-based yoga practices specifically adapted to the museum workplace and designed to connect staff with museum collections through embodiment-based practices. This study presents the approach and preliminary findings from a pilot session conducted at the Museum of Asian Art (Turin, Italy), in which participants reported their levels of anxiety and stress before and after the intervention and provided qualitative feedback. Results offer initial evidence that museum-tailored yoga may support staff wellbeing, laying the groundwork for clarifying how embodiment-based practices relate to art appreciation and for developing structured programs that can be adapted across institutional contexts to enhance employee wellbeing.

Keywords: Museum, Yoga, Wellbeing, Anxiety, Stress, ASBA, MuseOm.

1. MUSEUMS AS REGENERATIVE AND RESTORATIVE ENVIRONMENTS

The evolving role of cultural institutions at the beginning of the 21st century includes providing a regenerative and therapeutic presence in society. This contemporary form of museum activity has been formally defined as museotherapy [1]: a concept that is now an integral part of museums, increasingly being embraced as centers for health and wellbeing. This recognition is increasingly supported by empirical evidence demonstrating the direct regenerative value of museum interventions on different populations, bridging the gap between culture and public health. The growing interest in the non-traditional functions of museums has led to a body of research exploring their potential as restorative, healing, and wellbeing-enhancing environments. Museums are increasingly recognized as "experience hubs" that may help visitors thrive by increasing their mental wellbeing. This aligns with a contemporary trend where museums are actively integrating wellbeing activities into their spaces.

1.1. Museum-Beasd Interventions for Vulnerable and Clinical Groups

Evidence has been provided on interventions for vulnerable and clinical groups. For instance, Zakharov *et al*. [2] conducted a pilot study demonstrating that a weekly, on-site museum intervention enhanced wellbeing in people with mild-to-moderate cognitive impairment (MCI-moderate), showing significant improvements in quality of life and a significant reduction in depression symptoms. In parallel, Schall *et al*. [3] found similar results employing a rigorous randomized wait-list controlled study. Delfa Lobato *et al*. [4] reviewed 145 studies on cultural activities, mostly including museum programs, reporting post-intervention improvements in general cognition, emotional wellbeing, socialization, communication, and reduced depression symptoms. These findings are in line with one ones analized by Zeilig *et al*. [5] who synthesized eleven studies on museum-based programs.

Further research on therapeutic mechanisms confirms that activities such as object handling have positive effects on mood and emotion, with qualitative evidence suggesting they facilitate new learning and social inclusion [6]. Similarly, a study on stroke in-patients found that museum activities promoted high levels of concentration, provided positive distraction from the hospital environment, and boosted self-esteem [7].

Logistically, the efficacy of wellbeing-related programs is positively influenced by the characteristics of cultural institutions [8], and the "Museum Moving to Inpatients" initiative demonstrated that introducing the "museum" in the hospital setting can decrease patient anxiety by nearly 80% [9].

Museum programs, leveraging their regenerative potential, can be an ally of public health systems. Studies confirm that a single museum visit, whether doctor-prescribed or for underserved patients with acute illness or facing psychosocial stressors,

*Address correspondence to this author at the Department of Philosophy "Piero Martinetti", Università degli Studi di Milano, Milan, Italy;
E-mail: claudio.lucchiari@unimi.it

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significantly improves wellbeing and quality of life [10, 11].

The museum environment offers highly effective support to individuals transitioning from clinical care back into the community. Morse *et al*. [12] conducted a mixed-methods study examining the effects of weekly creative museum outreach sessions; their findings revealed additional gains in pride, learning, skills, and creativity. Further detailing the mechanisms of recovery, qualitative studies show that museum-led programs for individuals with mental illness facilitate socialization and enhance wellbeing and empowerment by offering a meaningful occupation [13]. Furthermore, long-term, quasi-experimental programs demonstrate a significant increase in mental health recovery scores and functional social support, with participants perceiving the impact on their sense of meaning in life, hope and optimism, and connectedness [14]. Amplifying these findings, Thomson *et al*. [15] assessed the biopsychosocial effects of a 10-week creative green prescription museum program for adult users of mental health service: the qualitative findings highlighted decreased social isolation and the formation of communities of practice.

As synthesised by the narrative review of Fares *et al*. [16], museum activities demonstrate positive health outcomes across diverse populations, including patients with chronic mental and physical diseases, as well as general improvements in the physical and mental wellbeing of younger and older individuals.

The body of literature suggests that museum art-based interventions may be integrated as part of the non-pharmacological management of mental disorders and for general population wellbeing.

1.2. Museum-Based Interventions for Non-Clinical Populations

Within the scope of non-clinical populations, the evidence from social prescription programs confirms the museum is a regenerative setting for older adults. These programs yield significant empirical improvements in positive affect, social inclusion, and cognitive engagement for participants at risk of loneliness [17]. Todd *et al*. [18] deepened the understanding of how museum programs influence wellbeing among socially isolated older adults. Their study emphasised that successful outcomes depend not only on the aesthetic qualities of the setting but also on its accessibility, the presence of skilled staff, and the creation of a safe, engaging environment which encourages social interaction and reflection. More recently, empirical studies have provided quantitative validation of these earlier findings [19].

Moreover, Dupuy *et al*. [20] advanced a line of inquiry by identifying neuronal correlates of psychological regeneration during museum visits; they found that increased prefrontal activation (particularly in the left ventrolateral prefrontal region) was associated with reductions in anxiety and stress after the visit. This study is notable for linking subjective wellbeing improvements with neurophysiological mechanisms, suggesting that regenerative experiences in museums are underpinned by measurable neural processes. These results support the view that cognitive effort and focused attention may be key ingredients of museum-based restoration.

Keeping the focus on the non-clinical population, a case study demonstrates that local museums act as valuable community resources capable of enhancing health and wellbeing, even during crises like the COVID-19 pandemic [23]. Visits to art museums have been shown to induce significant improvements in overall psychological wellbeing, particularly fostering personal growth and positive relationships [21]. Similarly, another study explored the influence of an art museum visit on stress indicators, revealing a significant reduction in average levels of self-reported stress and arousal [25]. The emotional and therapeutic functions of art museum space have also been explored by Yi & Thani [22], who suggested that the distinct visual and emotional experience created by the layout of works and exhibition halls can change emotional states and improve overall happiness. Recent research has incorporated neurophysiological measures to predict emotional reaction. Vanutelli *et al*. [23] carried out a study in two Milan-based museums (arts and science) demonstrating that museum visits were associated with significant improvements in mood and reductions in state anxiety. They found that a baseline neurophysiological marker (theta/beta ratio), alongside trait anxiety and perceived stress, could predict the magnitude of state anxiety change.

Moving beyond general visitor studies, a growing subset of research focuses on specific therapeutic interventions and the role of the physical environment in fostering wellbeing, particularly for specific groups. For instance, Wei *et al*. [24] conducted a mini-review to explore the level of anxiety experienced by teenagers during the COVID-19 pandemic. Their work outlined the main forms of museum education and highlighted its support for the potential functions of art therapy for anxiety. A pilot study caried out by Annechini *et al*. [25] examined the restorative aspects of museum experience on children. Analyzing a structured school visit, the research emphasized the high value of the museum physical environment in and around the building as an object of fascination that positively affects young visitors.

Taken together, these studies articulate a consistent argument for the museum as a healing and regenerative environment. They converge on the idea that the museum's therapeutic potential arises from a combination of cognitive engagement, emotional resonance, and social participation.

2. THE MUSEUM AS A SUPPORTIVE WORKPLACE AND THE ASBA PROJECT

Cultural institutions function as active sites for enhancing wellbeing across the spectrum of psychological health, providing a compelling rationale for innovative, tailored interventions. While the primary focus of research on the museum as a revitalising environment is heavily directed at the visitor experience, the internal working environment and the wellbeing of the staff who deliver these experiences are equally crucial for institutional viability and sustainability. However, studies specifically focused on museum staff wellbeing remain rare compared to the body of literature dedicated to visitors.

Nevertheless, the available research emphasises the complexity of the working environment: a study on human resource management in art institutions confirmed that a management approach that adjusts for cultural and emotional aspects is key to ensuring that innovation works alongside order maintenance [26]. The impact of daily museum work on the psychological state of employees was investigated by Binnie [27]. The findings suggest that even brief, casual engagement with the collection in the workplace offers an intrinsic, restorative benefit to the employees themselves. However, another study highlighted significant occupational stress stemming from managerial tensions, performance pressures, and role devaluation [35]. By and large, workplaces are widely acknowledged as potential sources of employee stress, often due to demanding conditions, interpersonal dynamics, or organizational factors that can adversely impact mental and physical wellbeing [28]. The Museums Association reported that the main factors affecting employees' wellbeing include workload, physical comfort and safety, autonomy, inclusion, recognition, and support [29]. Similarly, the International Council of Museums (ICOM) presented the results of a large-scale survey conducted in Germany on the working conditions of museum professionals, revealing that many employees experience significant stress and are considering leaving the sector [30].

To specifically address the psychological challenges facing museum staff, the ASBA Project (Anxiety, Stress, Brain-friendly museum, Approach) was developed in 2022 as a structured, university-led intervention. The foundational premise of the ASBA Project is that active engagement in cultural activities offers a powerful means of promoting wellbeing and reducing the levels of stress and anxiety, which are significant societal burden, further exacerbated by global crises like the COVID-19 pandemic. The core methodology of the project is grounded in the Brain-Friendly Museum approach [31], a theoretical framework which utilizes principles from psychology and neuroscience to optimize the museum experience for cognitive and emotional benefit.

The ASBA Project represents a significant development in the field because it is not merely a program but a research initiative based on a rigorous researcher protocol approved by the Bicocca University ethics committee [32] and implemented by a multidisciplinary team of university researchers, museum experts and certified practitioners. This ensures the data collected on wellbeing outcomes are systematically and ethically gathered, strengthening the scientific validity of the findings.

The program design included a crucial phase focusing on museum staff wellbeing, aiming to mitigate the high levels of work-related stress and anxiety reported across the sector. The intervention employed within the project, which was implemented with museum staff to enhance team wellbeing, focused on four methodologies (mindfulness, art therapy, chair yoga and nature+art). This paper focuses on the chair yoga session.

2.1. Reducing Stress in the Workplace. The Case of Yoga

A wide range of workplace health promotion interventions have been implemented to mitigate occupational stress, including coping-skills workshops or cognitive-behavioral training [33], physical activity promotion programs [34], as well as mind-body practices, such as mindfulness and yoga-based interventions [35-37]. Considering this last area, previous research [38] tested the efficacy of a 10-week yoga program aimed at university faculty, staff, and students, revealing significant results in perceived stress reduction as well as self-reported psychological, behavioral, and physical symptoms of stress. Also, a systematic review [37] proved the efficacy of yoga interventions in reducing work-related stress and enhancing wellbeing.

"Yoga is the stilling of the changing states of the mind" ("*Yoga citta vritti nirodhah*") [39]. Rooted in ancient Indian philosophy, yoga is a discipline aimed at cultivating mental clarity and self-understanding. The word yoga comes from the Sanskrit root "*yuj*", which means "to unite" [40] or "to yoke", reflecting its goal of harmonizing individual and universal consciousness. In

a more contemporary sense, this union can be understood as the integration of body, mind, and consciousness.

Traditional teachings conceptualize yoga as a set of practices designed to quiet the mind and realize the true nature of the self. According to The Yoga Sutras [39], the classical system comprises eight components: *yamas* (ethical disciplines), *niyamas* (personal observances), *asanas* (physical postures), *pranayama* (breath control), *pratyahara* (withdrawal of the senses), *dharana* (concentration), *dhyana* (meditation), and *samadhi* (union with the divine). In contemporary contexts, especially in the West, yoga is often practiced as *Hatha Yoga*, integrating physical postures (*asanas*), breathing techniques (*pranayama*), and meditation (*dhyana*) [40-42]. This integrated approach promotes holistic wellbeing by fostering mindfulness and bodily awareness [42, 43]. In fact, research indicates that yoga can foster physical, physiological, and psychological wellbeing. Physical benefits include improved flexibility, balance, muscular strength, and mobility [44-46]. Physiological benefits include breathing efficiency, cardiorespiratory fitness, reduction in blood pressure and respiration rate, as well as improved sleep quality [47–50]. The psychological and emotional effects of yoga appear even more pronounced. Long-term practice is associated with lower perceived stress and greater relaxation [51-53]. A substantial body of evidence supports yoga's effectiveness in reducing anxiety and depressive symptoms across different populations [51, 54–57]. These findings suggest that yoga may foster both emotional regulation and resilience by modulating the stress response and promoting relaxation and mindfulness.

In this regard, two main mechanisms can be hypothesized [43], one more related to physiological regulation, and the other to cognitive mechanisms. From a physiological perspective, stress involves overactivation of the hypothalamic–pituitary–adrenal (HPA) axis and the sympathetic nervous system (SNS), which is responsible for the fight-or-flight responses, leading to increased release of cortisol and catecholamines [58]. This response triggers physiological arousal—elevating heart rate, blood pressure, and rapid breathing. Yoga practice may counteract this process by promoting parasympathetic nervous system (PNS) activation and downregulating HPA and SNS activity [59] through slow, rhythmic movements and controlled breathing that induce a relaxation response [60]. Considering the cognitive perspective, yoga may reduce stress by fostering intentional attention to present-moment experiences, thereby acting as a filter and deterrent against rumination and mind-wandering [61]. Indeed, it has been described as "embodied mindfulness" or "mindfulness in motion" [62, 63]. Of course, the two mechanisms are intertwined in a virtuous cycle.

2.3. The Present Study

Although some previous studies have examined the effectiveness of mindfulness-based interventions in museum settings [64, 65], yoga initiatives have so far been limited to a few isolated implementations, with no systematic evaluation of their impact. Thus, the aim of the present study was to evaluate the effectiveness of a brief, one-shot yoga intervention in promoting the wellbeing of museum staff. The empirical investigation was conducted at the Museum of Oriental Art (MAO) in Turin, Italy, using a mixed-methods pre–post design. The quantitative investigation was conducted by assessing state anxiety and mood states as outcome measures related to perceived wellbeing. The qualitative investigation was conducted through the analysis of discourse content emerged from post-session focus groups. The yoga sessions were designed following the MuseOm method, which integrates artworks into the sequence.

3. MATERIALS AND METHODS

3.1. Participants

Seventeen staff members (M_{age} =48.05, SD =11.31) aged 22-64, all women, participated in the study. Inclusion criteria were: being 18 years old or older; accepting the conditions for participation and having signed the informed written consent. Exclusion criteria were: insufficient language skills in understanding verbal assignments and interacting with colleagues; current diagnosis of a disease of psychiatric or neurological nature; uncorrected visual or hearing impairment; presence of another medical condition that could negatively affect the activities.

This study was conducted with the understanding and written consent of the participants, who had been informed of the research procedures and purposes according to the Declaration of Helsinki and with the approval from the local Ethical Committee (University of Milano-Bicocca; protocol code: 733).

3.2. Procedure and Instruments

The study procedure was articulated into six main phases (see Table **1**):

I) Recruitment and informed consent

The study proposal was disseminated to all museum staff members of the three involved museums (MAO, Palazzo Madama, and Galleria d'Arte Moderna located in Turin), outlining the project's aims and activities. Individuals who expressed interest were

invited to read the information sheet detailing the study procedures, potential risks and benefits, and the expected time commitment. Those who agreed to participate in the study were subsequently contacted and scheduled to participate in the intervention, which lasted approximately three hours in total. Before being involved in any other phase of the study, participants were asked to sign the informed consent. Researchers were available to integrate the information or to provide any further assistance.

II) Pre-intervention assessment

Before the intervention, participants completed a set of questionnaires assessing sociodemographic data, dispositional characteristics, and emotional states. Dispositional scales included the Trait Anxiety Inventory (TAI) [66] and the Perceived Stress Scale (PSS) [67]. TAI consists of 20 statements where participants are asked to describe how they generally feel, on a Likert scale ranging from 1 (not at all) to 4 (very much). PSS is a measure of the degree to which situations in a person's life are rated as stressful, in relation to the last month. For each item, people are asked to indicate how often they felt a certain way, from 0 (never) to 4 (very often). Scores higher than 27 are considered high, while people with a score lower than 14 are considered to have no stress. Data collection took place in a museum room dedicated to educational activities, equipped with large tables to ensure privacy and a quiet atmosphere. Emotional assessment involved the State Anxiety Inventory (SAI) [66] and a visual–analog scales (VAS) [68]. SAI was administered both before and after the museum visit to assess the changes in State Anxiety (pre- and post-experience assessment). The scale includes 20 statements where participants are asked to describe how they feel in the present moment on a Likert scale ranging from 1 (not at all) to 4 (very much). MOOD-VAS were presented to assess participants' moods and states of mind before and after the museum visits. The first question was about general mood, *i.e*., "How do you rate your mood right now?" with a choice among 10 steps from 1 (negative) to 10 (positive). The next 5 questions required assessing the intensity of certain states of mind experienced at the present moment, from 1 (absent state) to 10 (very present state), and specifically stress, mental clarity, contentment, calmness, and restlessness.

III) Yoga practice

Participants were first introduced to the technique through a brief theoretical explanation provided by the certified yoga instructor. They were then accompanied to the designated museum hall where the session took place. After a short orientation regarding space, timing, and safety, the practice began and lasted approximately 60 minutes in total. A specific methodology was introduced to adapt the yoga practice to the museum environment (MuseOm; See Supplementary Materials).

IV) Debriefing

At the end of the session, participants were invited to arrange their chairs in a circle. The instructor,

Table 1: Schematic overview of the methods including participants details, phase, applied instruments, duration, and phase facilitators

Participants			
N	**Role**	**Age**	**Gender**
17	Staff members	M=48.05, SD =11.31) Range: 22-64	All women

Procedure				
Phase		**Instruments**	**Duration**	**Led by**
Phase 1: Recruitment and informed consent		• Information sheet • Informed consent	5 min	• MAO referee • Researcher
Phase 2: Pre-intervention assessment	*Dispositional characteristics*	• TAI • PSS	5 min	• Researcher • Psychologist
	Emotional states	• SAI • MOOD-VAS	5 min	
Phase 3: Yoga practice		MuseOm method	60 min	• Yoga instructor
Phase 4: Debriefing		Guided open-circle group discussion		• Yoga instructor • Art historian
Phase 5: Post-intervention assessment	*Emotional states*	• SAI • MOOD-VAS • Qualitative inquiry	10 min	• Researcher • Psychologist
Phase 6: Focus group		Focus group	60 min	• Researcher • Psychotherapist

together with a member of the educational department of MAO, facilitated a debriefing discussion to collect immediate impressions and respond to questions or comments.

V) Post-intervention assessment

Following the session, participants returned to the same room used in Phase II to complete the state anxiety and mood questionnaires again. In addition, an open-ended section was provided, allowing participants to share qualitative feedback about their experience, including inventing a title for the session and offering reflections or comments.

VI) Focus group

As a final step, a focus group was conducted by a researcher together with a trained facilitator – a licensed psychologist and psychotherapist experienced in group dynamics – with the aim of capturing meaningful insights, shared interpretations, and emerging themes regarding the experience. The discussion was recorded and transcribed. Conductors' notes and comments were recorded and used to guide the following qualitative analysis. The transcript was read and analyzed individually by two researchers (a psychologist and an art historian), who marked the main themes raised following a pure inductive analysis. Subsequently, the researchers compared their analysis and discussed it to get to a final agreement.

4. RESULTS

4.1. Quantitative Data

Participants reported a moderate level of stress as revealed by the PSS score (M = 19.21; SD = 4.32) and a moderate level of trait anxiety as measured by the TAI (M = 35.21, SD = 9.21). This data correlated with the state anxiety as measured by the SAI before the Yoga practice (r = .554, p <.001). To compare the anxiety level before and after the intervention, we used the Related-Samples Wilcoxon Signed Rank Test, a non-parametric test particularly reliable in small samples. The test revealed a significant change in anxiety level (W = -3.218, p = 0.001), which decreased in the post-yoga assessment. Also, all the VAS used to assess psychological parameters showed significant changes (see Figure **1**).

Looking for possible factors that may contribute to the effectiveness of Yoga, we performed a series of correlations between anxiety-related variables and personality traits as measures by the BIG-5. However, no correlations were statistically significant. We found significant correlations only with traits values. In particular, state anxiety was negatively correlated with extraversion (r = -0.434, p = 0.029) and open-mindedness (r =-0.495, p =.016). The perceived stress, instead, was negatively correlated with emotional stability (r= -0.565, p = .005).

4.2. Qualitative Data

Theme 1: Overall experience and group dynamic. Participants overwhelmingly described the experience as positive, stimulating, and beautiful ("Awesome", "Very interesting"). The group setting was highlighted as a key positive factor, creating shared, supportive energy that was even more valuable than doing the activity alone. Many noted a positive shift in group dynamics, feeling a greater sense of connection, confidence, and camaraderie among colleagues.

Theme 2: Comparison to other practices and unique value of yoga. The session was compared to

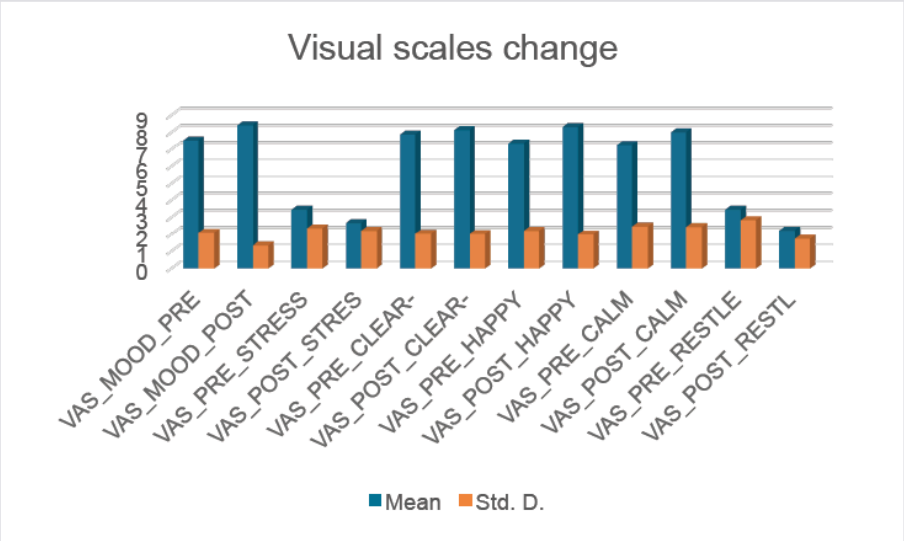

Figure 1: Mean (blue) and standard deviation (red) of VAS values before and after the Yoga session.

previous activities proposed in the same museum setting (*e.g.*, art therapy). Yoga was specifically perceived as particularly powerful and effective for mental relaxation and focus ("clean the brain", "being here-and-now). The physical, embodied nature of yoga was seen as a key factor in distinguishing it from other experiences and techniques. Yoga was described as being able to create a deeper connection than more theoretical lessons or technical practices.

Theme 3: Integration with the museum environment (museum objects and space). This was a central and highly praised theme. Using the museum collection for inspiring the Yoga activities and postures was considered a major success. Participants felt that linking yoga poses and the practice narrative to the specific exhibits (statues, paintings, and screens) led to a deeper, more profound engagement with the collection. It even changed participants' perception of familiar objects, making them see them in a new, more emotional, and less analytical way. The museum setting contributed to the sense-making of the experience, since everything was coherently joint: People, items, spaces and bodies.

Theme 4: Logistics and practical issues. The duration was generally considered adequate, though some felt the final sharing/discussion period was slightly rushed or truncated. The decision to use chairs instead of floor mats was widely appreciated. It was seen as respectful of the museum space, prevented crowding, and made the activity accessible. It was also considered particularly compatible with a workplace, since the seated position was considered coherent with the participants' usual activities and the security of the collections. The space and atmosphere was deemed "perfect." The lighting, the ambiance, and the strategic arrangement of chairs contributed to a relaxing and appropriate atmosphere. The number of participants was considered close to the maximum comfortable capacity.

Theme 5: Sensorial elements. The use of sound, specifically the Tibetan singing bowl, was noted as a pleasant and impactful element that enhanced the immersive experience. However, a concern was raised about the potential for repeated sounds to become irritating.

Theme 6: The instructor's role. The instructor was praised for her skill and, importantly, for creating a non-judgmental and encouraging atmosphere.

Theme 7: Applicability and future potential. Participants strongly believed that MuseOm practices should be implemented as regular, optional activities for staff, helping to decompress and improve the work environment. Some suggested it could also be offered as an additional service for the public, enhancing the museum's offerings. A noted challenge was how to involve staff from all departments (*e.g.*, administrative offices, conservators), not just front-of-house and education staff.

In summary, the focus group revealed a highly successful pilot program where the combination of yoga, a supportive group of colleagues, and the inspiring context of the museum collection created a powerful and beneficial experience that participants were eager to repeat.

5. DISCUSSION

The preliminary results obtained from the application of the single-session chair yoga intervention (MuseOm) for the staff at the three involved museums located in Italy, confirm the efficacy of this approach. The quantitative pre-post analysis of the session revealed a significant decrease in self-reported levels of anxiety and stress, suggesting that brief, targeted interventions rooted in the museum environment can produce a rapid regenerative effect.

This result aligns with previous literature that has extensively demonstrated the benefits of workplace yoga [37] in alleviating stress, although such studies typically examined multi-week interventions. The present study therefore provides a unique and original contribution, both in terms of its brief duration and its specific museum setting. This not only highlights the heterogeneity of environments in which yoga-based interventions can be implemented but also foregrounds the distinctive cultural and artistic dimension of the context. Indeed, the successful adaptation of chair yoga, utilizing postures and movements that specifically refer to and correlate with the museum collection (Asian art), was shown to foster a reconnection between the employees and their workspace (see Figure **2**). We can hypothesize that the effectiveness of this intervention arises from the complex interplay among three key elements: yoga, art engagement, and wellbeing. Yoga contributes to wellbeing—as widely documented in the literature—through mechanisms involving both autonomic responses and cognitive processes. At the same time, when practiced through the MuseOm method, yoga enhances immersion in the artistic environment via embodiment-based mechanisms. This process enables participants to perceive artworks with a renewed gaze while recursively enriching the yoga practice itself, which becomes more focused and grounded in the symbolic, aesthetic, and environmental

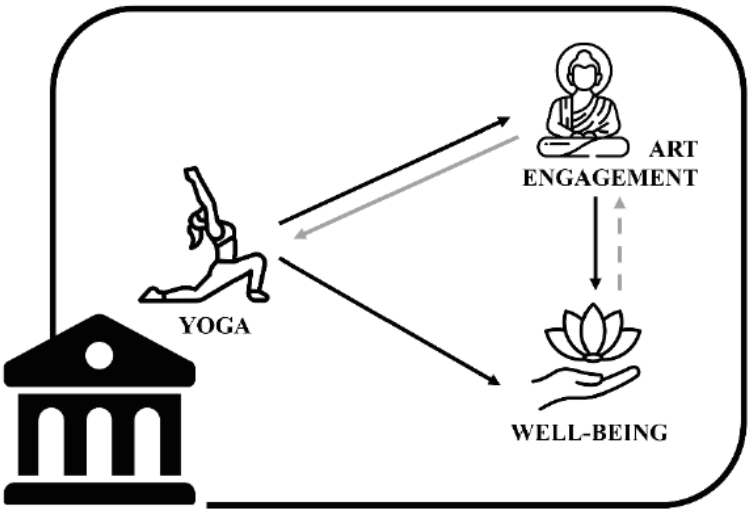

Figure 2: Conceptual diagram of the hypothesized embodiment-based mechanisms linking yoga, art engagement, and wellbeing within the MuseOm method.

parallels offered by the museum setting. Art engagement, in turn, supports psychophysical wellbeing, as demonstrated both by the ASBA project and by other clinical and preventive interventions conducted in museum and artistic contexts. Over the longer term, this mechanism may again reinforce art engagement: individuals whose psychophysical wellbeing is supported are likely to have greater internal resources to invest in cultural activities and sustained contact with art. We can therefore identify the museum as an active catalyst for wellbeing, unfolding the therapeutic value of cultural objects as resources for emotional regulation and self-care.

The adoption of chair yoga thus proves to be a highly practical and sustainable solution for cultural institutions. The practice is low impact, requires no specialized equipment or changing rooms, and can be seamlessly integrated into short work breaks, resolving key issues of operational compatibility with the daily schedules of museum professionals. Moreover, the effectiveness of this intervention was amplified by the thematic synergy between the principles of yoga and the original function of the Asian collection.

Despite the strength of the preliminary findings, the study is subject to limitations inherent to its pilot design. The single session intervention does not allow for the evaluation of the duration of the effect over time, nor can it assess the impact of continuous practice on the reduction of chronic stress or burnout. Besides, the specific contextual link between yoga and the Asian collections raises a fundamental question about the generalizability of the intervention: would the same protocol be equally applicable and effective in museums with less thematically resonant collections, such as an archaeological site?

6. CONCLUSIONS

This study sought to address a critical gap in the research literature regarding yoga practice and regenerative function of cultural institutions by shifting the focus of inquiry from visitors to the museum staff. While existing literature has extensively validated the museum as a setting for public wellbeing, the wellness of museum staff, who frequently struggle against organizational stress and burnout, has remained largely unexplored.

To advance the research agenda of the ASBA project, future studies should focus on: (1) follow up sessions to evaluate long-term effects on the staff's psychological and physical health; (2) the inclusion of physiological measures (such as EEG) alongside self-report data to provide more objective validation of the stress and anxiety reduction effects.

In addition, this line of research holds promising implications for institutional wellbeing strategies. The MuseOm method—by integrating embodiment-based yoga practices with art engagement—could be adapted not only to support staff wellbeing but also to design structured and continuous programs for museum visitors, families, and even clinical or vulnerable populations. Its emphasis on embodied connection with cultural heritage offers a transferable model for other sectors in which symbolic, aesthetic, or culturally meaningful environments are central, thereby expanding the potential cross-sector applications of art-based wellbeing interventions.

In conclusion, this research marks a step toward the recognition of museum staff not just as a workforce, but as a primary recipient of wellbeing initiatives. By doing so, it legitimizes the cultural institution as a powerful

and regenerative environment for the entire community that inhabits and animates it.

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INSTITUTIONAL REVIEW BOARD STATEMENT

The study was conducted in accordance with the Declaration of Helsinki and approved by Ethical Committee of Università degli Studi of Milan-Bicocca (approval number 733, 11 October 2022).

INFORMED CONSENT STATEMENT

Informed consent was obtained from all participants involved in the study.

DATA AVAILABILITY STATEMENT

The data presented in this study are available on request from the corresponding author. Data are not publicly available due to privacy concerns.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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