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Pause, observe, intend: A qualitative study exploring expert practitioners' perceptions of how mindfulness and Alexander technique work synergistically to address stress

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ABSTRACT

Introduction: Mind-body disciplines provide effective self-regulation strategies in the face of stress, but the specific techniques and proficiencies of these disciplines are not well understood. The qualitative study presented here provides insights into this problem by documenting how expert practitioners understand the experience of engaging two holistic mind-body disciplines together to self-regulate when under stress.

Methods: Seventeen expert practitioners who were trained and deeply invested in both mindfulness meditation and Alexander technique participated in semi-structured interviews, detailing their experiences as they recalled stressful moments. Results were analyzed with thematic analysis. We used a feminist approach in both interviews and analysis.

Results: Our analysis identified three shared themes, each of which describes a skill set useful for managing stress: finding distance and time (pausing and creating emotional distance from the situation), observing (one's thoughts, emotions, body, and environment), and maintaining an intention (short-term and long-term). These themes provided a framework for comparing how the two disciplines function in practice. Differences lay in specific application, with participants describing mindfulness as providing a more nuanced approach to navigating internal narratives and emotions and Alexander technique as providing more fully developed tools for managing muscular and postural manifestations of stress.

Conclusion: Dual-discipline experts can provide rich descriptions of the specific skills cultivated in mind-body disciplines, the advantages and limitations of each discipline, and how two disciplines can work together. Participants described specific ways that mindfulness and Alexander technique can work together to address cognitive, affective, and physical responses to stress, thus providing a comprehensive toolkit for stress management.

1. Introduction

Life presents many potential stressors, from the mundane inconveniences of rush hour traffic to the life-altering challenges of chronic illness and war. While the severity of these stressors varies greatly, their cumulative effect can have a profound impact on mental and physical well-being [1–3].

Individuals employ a variety of self-regulatory strategies in stressful situations to maintain or restore an appropriate level of calm following a stressful disturbance [4–7]. Mind-body disciplines have shown potential for cultivating such self-regulatory strategies in the face of stressors - for example meditation-based practices [8,9], Alexander technique [10], yoga [11], Feldenkreis [12], Tai Chi and other martial arts [13], and Somatic Experiencing [14], to name a few. Such disciplines emphasize the interconnectedness of mental and bodily states [15–17] and range from purely meditative [18] to more somatic [19] disciplines. Heightened awareness of one's internal state may allow a practitioner to gain distance from a stress response and thereby make constructive decisions

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about redirecting undesirable mental and physical reactions [5,9,20,21]. We use the term 'practitioner' throughout this paper to indicate someone engaging with any mind-body discipline consistently over time. This terminology is common to many practices, including Mindfulness and Alexander technique.

Practitioners of different mind-body disciplines practice different techniques, leading to different proficiencies. The techniques may include observing thoughts and emotions, noticing physical sensations such as muscle tension, engaging in complex and challenging movements or postures, attending to alignment and body relationships, and actively engaging with processes such as breathing or muscle tension [15,21–23]. The proficiencies may include increased awareness of thoughts and body sensations as well as the ability to actively engage with bodily states through awareness and intention, though precisely defining and measuring such proficiencies is challenging [9,24–26]. These proficiencies develop from deep practice, with each discipline having its own specific subtleties. These variations create a challenge for researchers interested in describing how such disciplines function in practice.

Two examples of disciplines in this category are mindfulness and Alexander technique. Mindfulness training, with its core practice of meditation, is a widely recognized approach in stress management [4,27,28]. Core principles include cultivating present-moment awareness and accepting thoughts and feelings without judgment [28–30]. By focusing attention on the here and now, mindfulness can alleviate stress caused by ruminating on the past or worrying about the future [31–33]. Thus, mindfulness fosters emotional regulation, allowing individuals to respond more calmly to stressful situations [7,34,35].

Alexander technique is highly regarded in the performing arts world as a method for managing performance anxiety, enhancing stage presence, and reducing repetitive strain injury [10,36–43]. It has also been studied as an intervention for chronic pain [44,45] and Parkinson's disease [46–49]. By developing fine-grained awareness of postural habits that contribute to inefficient patterns of muscular activity, practitioners learn to move and react with less strain [50,51]. Alexander technique's tools for addressing physical reactions to stressful situations can promote a sense of lively relaxation and well-being [52].

While the approaches of these two disciplines can seem at first glance quite different, with mindfulness focusing more on acceptance of thoughts and feelings and Alexander technique focusing more on postural habits and muscle tension, the two in fact share many aspects. Both disciplines address reactivity, non-judgmental observation, recognition of habitual patterns, mind-body unity, and intentional thinking [23,28,31,53–55]. Neither of these disciplines relies on practicing novel movements or challenging postures; both are applied in simple positions and movements such as sitting, standing, and lying down, as well as in other daily activities.

In this study, we look at how expert practitioners combine techniques and proficiencies from these two mind-body disciplines in the face of stress. We selected mindfulness and Alexander technique for the overlap and divergence in their practices, which allowed for a comparative analysis. This was a novel choice – there is no precedent in the literature for studying these two disciplines together. We interviewed dual-discipline experts trained extensively in both mindfulness and Alexander technique. We reasoned that interviewing such a group would provide insights beyond what one could learn from interviews with experts in the individual practices separately. We expected that their insiders' access to both disciplines would allow them to provide in-the-moment comparisons and detailed descriptions of discipline-specific skills, as well as relative strengths and shortcomings of each discipline. We also hoped such a group could describe in detail their perceptions of whether and how the two disciplines can work synergistically in the face of stressors. Finally, we anticipated that this approach would demonstrate a means for understanding the subtleties of mind-body disciplines in general, how discipline-specific technique and proficiencies can be compared, and how disciplines might be combined to support self-regulation in the face of challenging life circumstances.

2. Methods

2.1. Ethics statement

The study was approved by the Institutional Review Board at the University of Idaho and was conducted in accordance with the 1964 Helsinki declaration.

2.2. Study design

Participants with extensive training in both disciplines were asked to describe their experience of a recalled stressful event in an interview. The interviews centered around how the dual discipline experts used tools from each discipline in the context of our central concern: self-regulation during stressful situations. By exploring remembered stressful experiences, we aimed to encourage participants to closely examine how they applied the two disciplines.

We used semi-structured interviews to encourage participants to verbalize and analyze their actions, behavior, and thoughts during the stressful moments that they recalled. This approach aimed to elicit detailed and nuanced explanations of their experiences [56]. It was also intended to facilitate exploration of contexts and the interplay of procedural, practical, and theoretical knowledge [57] related to mindfulness, Alexander technique, or both.

We used a feminist approach in our design, data collection, and analysis [56–58]. Given our team's experience in both disciplines studied and the complexity of the topic, we aimed for promoting in-depth conversation, acknowledging potential perceptions of hierarchy or bias. The feminist approach, which advocates sharing of backgrounds, extensive back and forth conversation, and explicitly addressing hierarchy, suited these goals.

Our goal in the interviews was to construct a safe, non-hierarchical space for explorations, openness, and curiosity, where both interviewers and participants could seek for meanings together throughout the whole interview process [56]. Questions were developed as a research team, out of our own understandings of both disciplines and of qualitative methodology. The questions were sent to participants in advance to reduce their anxiety, to allow them to prepare for the interview, and to give them the chance to raise any concerns about the nature of the questions prior to interview. Furthermore, participants were given freedom to expand the conversation outside of these questions as needed, empowering them to co-determine the rules of engagement. As interviewers, we aimed to be explicit in conversation with participants about how their backgrounds and perspectives shaped their experiences and practices of the two disciplines. With backgrounds in both disciplines, the interviewers could also be seen as co-experts [57]. We used follow-up questions specifically as a means for inviting the interviewees to further expand on specific details of their experiences. One interviewer took the lead on asking the predetermined questions, with all three interviewers participating in follow-up questions. We encouraged participants to use terminology that was not discipline-specific (jargon), to ensure that interpretations and assumptions about meaning were made explicit. We used active listening, attending to the spoken words as well as the silences, and sharing what affected us in what we heard [57]. Three members of the research team were present for the majority of interviews. Similar to the methodology used in Monforte and Ubeda-Colomer [59] the interviewers saw knowledge as constructed and developed through dialogue. The interviews were occasions to generate original and rigorous knowledge, focusing on how the practitioners responded to stressful situations. This approach allowed participants and interviewers to reflexively engage together in real-time interactions, with the surprises that can arise in the semi-structured interview format. This team approach is thought to provide a well-rounded perspective [60–62], to allow for

curiosity-driven questions as unexpected or interesting ideas surface [60], and to keep a check on individual tendencies to follow particular lines of questioning.

Thematic analysis was chosen because this research topic is under-researched. The goal was to uncover patterns, generate hypotheses, and build a foundation for further investigation rather than to create a conceptual model [63]. We expected thick descriptive data [64] from in-depth interviews — data that would provide contextual detail and require a deep, context-specific interpretation. In keeping with the feminist approach, we continually examined our own perspectives as co-experts and adopted an empathetic stance towards our participants.

2.3. Participants

Participants were solicited via posting on social media groups for teachers and via email lists from professional organizations of Alexander technique and mindfulness practitioners. We specified that training in the latter discipline should be within a Mindfulness-Based Approach (MBA) [29], as that was where most of us had our own experience and training. We sought participants with extensive training, who were deeply invested in both disciplines. Those who responded received a short questionnaire asking for details about their training and daily practices, as well as their availability for an online interview. We received 43 responses. Three researchers (GMB, PJ, VD) used purposive sampling to review the responses and narrow the list to 17 participants. None of the selected participants dropped out. Criteria for selection included level of training as well as duration and depth of practice. We limited our scope to secular, well-defined mindfulness-based training fitting the criteria offered by Crane et al. [31]. Our baseline requirement was to have completed a minimum of one eight-week Mindfulness-Based Stress Reduction (MBSR) course, to be maintaining a regular mindfulness meditation practice, to have completed at least two years of training as an Alexander technique teacher, and to use Alexander technique and mindfulness practices regularly in their daily lives. All the selected participants exceeded this minimum requirement in both disciplines. The specific trainings are listed in Appendix A.

All the participants reported that they practiced and applied both disciplines daily, either separately or in combination. Participants described formal structured practice times as well as informal and often short moments of heightened awareness throughout the day.

2.4. Data collection

Prior to interviews, participants were contacted via email with an informed consent form that included a description of the interview process and questions. Participants were asked to prepare for the interview by recalling one or more stressful experiences in which they applied their training in Alexander technique and/or mindfulness as self-regulating mechanisms.

Interviews took place online via video conferencing (Zoom) at times convenient for participants. The interviews were roughly one hour long. Three researchers (GMB, PJ, VD) conducted the interviews together, except for several cases when one researcher was absent. The interviewers had a range of personal and professional practice in both Alexander technique and meditation (as well as other mind-body disciplines such as yoga, Pilates, Qi Gong, and Tai Chi). Two interviewers (GMB, VD) were female and one (PJ) male. Interviews were roughly one hour long. All interviews were recorded and transcribed automatically (Otter.ai), after which researchers checked transcriptions for accuracy. Following transcription, interviews were anonymized. Participant names are replaced with pseudonyms in this text.

The interviews included questions as well as time for conversation. Interview questions are listed in Appendix B. We determined before each interview who would lead each section of the interview, who would probe, and who would focus on active listening to ensure that the interviewees had opportunities to communicate what they wanted to share. Interviewers opened by asking participants about their backgrounds. Participants were then asked to describe one or more stressful experiences and explain how they used their training in either or both disciplines to cope with these experiences. Questions about the experiences followed; participants were asked to fill in details and to differentiate the application of the two disciplines. These follow-up questions were intended to establish rapport while helping participants fully articulate their experiences.

2.5. Data analysis

We used Braun & Clarke's thematic analysis sequence [65] as the framework for our team process of data analysis: becoming familiar with data, agreeing on initial codes, actively looking for and then reviewing themes before agreeing on a final set which could be used in our reporting of data. Data were analyzed inductively and iteratively, identifying themes from the data rather than beginning with themes in mind [66]. Transcripts were read and re-read, and audio recordings were discussed repeatedly by the researchers, allowing themes to emerge. The significance and implications of participants' responses were explored at length in this iterative process [65].

We endeavored to ensure rigor and reliability of analysis in several ways. First, we attempted to be receptive and deeply familiar with the data [67]. Analysis was initially semantic, looking at surface form and meaning before moving from description to organization of what was said [66]. To avoid rushing into premature selections of codes, we allowed several weeks for this initial taking in and processing of data [68]. The three interviewers coded the data, first independently followed by regular online meetings to discuss the significance and implications of participants' responses and each other's suggested codes [65]. This process was iterated multiple times to reach consensus on codes. The choosing of themes was carried out similarly, with independent analysis of code patterns followed by regular meetings amongst all four researchers to reach consensus. We deliberately sought to exclude predetermined themes taken from Alexander technique or mindfulness theory [69].

3. Results

Participants described a wide range of stressors, from everyday situations (i.e. making dinner, gardening, driving) to personal conflicts (i.e., disagreements with a spouse, anticipating a stressful social encounter, having a disagreement with a neighbor) to life-threatening moments (medical emergencies, having COVID before there was a vaccine). Some events described took place when the person was alone, whereas others were in public. For a full listing of the stressful events described, see Appendix C.

Participants were able to describe how they used a combination of coping mechanisms from Alexander technique and mindfulness in the face of stress. They were also able to identify, in most cases, whether the various strategies they used were more informed by their Alexander technique, their mindfulness training, or both. That said, nine participants spoke about the difficulty at times of teasing the two disciplines apart. They described the two disciplines as being "two sides of the same coin" (Roman) and said they used them "interchangeably, depending on the situation, [as] the two [disciplines] are intertwined" (Tamsin). Sue said: "They are two modalities that come together in one's individual practice."

To present and discuss our findings from the data we use two strategies: First, we present representative narratives from two participants. In both narratives we provide the context for the stressful event, how the participant recalled the event, and then how they analyzed it in the interview. Second, we present the themes that emerged across all the interviews.

3.1. Two stress narratives

This section presents two accounts of stressful moments and how two different participants dealt with them. These accounts were chosen as representative examples of the major themes and to present accounts of how discipline-specific skills were applied in real time in the face of stressors. We have labeled subsections with "Alexander technique", "mindfulness", and "Complementarity of Alexander technique and mindfulness" based on how the participants categorized the skills and experiences they described.

3.1.1. Stress story 1: noisy birds in the garden: *"I have created the stress for myself"*

At the time of the interview, Isabelle had 34 years of Alexander technique experience and six years of mindfulness experience. Her description of a stressful situation involved intrusive noise created by birds in the garden.

> I've got some rooks at the bottom of my garden. And at this time of year, they become really noisy, because they've got their babies and the nest building, and they're really quite active. And one day I was out in the garden, and I could feel that I was actually getting, in ordinary speak, tenser and tenser about this noise.

3.1.1.1. Alexander technique. Isabelle filled in more details about how exactly her body was getting tense.

> I was pulling down and stiffening my neck and sort of getting angry with the rooks. … I was bent over … on my knee … doing a border and the action was getting more vigorous. So I was actually … digging with more and more force. … I was using more effort than I would need to….

Besides noticing these details, Isabelle recognized a general "pattern of misuse" and connected it to her state of mind:

> I could sense from my abdomen upwards that there was a general sort of shortening … that I was generally curling up. … I had the sensation of shortening around the scapula and my neck … pulling my neck and head forward… a classic pattern of misuse. … And at that point, I realized just how stiffened my neck was, because of how out of control I was.

She realized that her own thinking produced the physical reaction of increased muscle tension, and that she knew how to stop it. "I thought, I shouldn't stiffen my neck. … Let that go."

3.1.1.2. Mindfulness. After choosing to let go of the stiffening of her neck, Isabelle spoke of using her mindfulness skills to shift her attention.

> … after I'd let it go … there was then a combination of recognizing … what I've done to myself, and coming back to my composure of myself, but also recognizing that it was a typical mindfulness-based … example of something that is potentially quite harmless, and you know it's not doing you any harm but I've reacted to it. … I've created a stress for myself … that didn't have to be there. I … realized how funny the situation was, and let it go. I was able to just reflect on it.

Isabelle's mindfulness training gave her a strategy of finding a cognitive distance from her reaction to the noise. Viewed from this light, the event became a practice to learn about her reactivity, and then she could see the humor of that moment. Again, she used the words, "Let it go," but in this case she was letting go of a narrative rather than a specific bodily response. She had gained insight into her internal narrative and intentionally reframed it so as to further de-catastrophize the situation.

3.1.1.3. Complementarity of Alexander technique and mindfulness. Isabelle used both Alexander technique and mindfulness to gain insight into the stressful event and to let go of a stress reaction. Alexander technique allowed her to sense and let go of embodied responses such as over-tensing, postural shortening, and unnecessary effort. The mindfulness training allowed her to sense her internal narrative as she reacted to something harmless, allowing her to distance herself from her own stress story.

3.1.2. Stress story 2: *"I'm sick, I'm scared … and I'm going to open up to that"*

At time of interview, Andy had about 20 years of mindfulness experience and teaching and 11 years of Alexander technique teaching and practice. For his stressful event, Andy described the experience of falling sick with COVID during the early days of the SARS-2 pandemic and being frightened:

> My family … got COVID, and I was sick with it. There were a couple days … that were sort of peak for me, where I was in bed most of the day. My breathing was kind of labored going up the stairs. … It was really scary. I was really scared because I had obviously heard all of these stories, terrible stories of people dying, and people getting kind of long-term illness, and having the breath affected was so immediate, and so physically proximate. … I felt that I didn't have anywhere else to go. I felt that kind of pressure.

3.1.2.1. Mindfulness. Andy described how his thoughts were affected:

> … I was very, kind of scrambled, sort of, from a thinking perspective. I was catastrophizing … projecting into the future, kind of rushing around needlessly, … constantly problem-solving what I need to do with thinking, thinking, thinking. … I was kind of aware on a certain level that was going on.

Having become aware of his catastrophizing and racing thoughts, Andy described applying mindful strategies for processing them.

> I wanted to slow down, slow myself down. … I used mindfulness to understand what I was really feeling. … there was a sense of like, "I'm sick, I'm scared. And I'm going to kind of open up to that on a kind of a heart level" … having the sense of - feeling that, you know, my heart is kind of involved in this situation.

He later clarified this transition from rapid thinking to a slower, more "heart-based" response by elaborating on the difference between thinking and feeling in this context:

> I conceive of a thought as … an idea, … a kind of a mental activity. So like a thought might be, "Oh, I left the oven on," or … "Oh, I need to go there." … A feeling is something that I can really perceive more in my body. … Maybe I feel it in my chest, or my belly or throat … so it's a felt sense, it's felt.

Mindfulness techniques helped him distance himself from his internal narratives and in so doing turn his attention to his sensations and construction of fear.

> There's a difference that I feel between being … chased by a feeling or chased by an emotion and actually … pausing and allowing myself to … viscerally, experientially feel it. …So what I'm talking about with feeling the fear is … giving up trying to resolve the situation. I give up trying to figure it out. And I allow myself to really just feel … what I'm experiencing. And also honestly, what has been building up within me, because I haven't quite really wanted to experience it.

In summary, his mindfulness training allowed Andy to let go of catastrophizing and goal-oriented thinking, so he could transition to a more accepting, experiential, body sensation-oriented approach.

3.1.2.2. Alexander technique. Meanwhile, Andy also applied his Alexander technique skills, starting with noticing the muscular contraction associated with his stress response. "Alexander technique was … working with all of the consequential tightening …while lying down, while going up the stairs, noticing, like squeezing in my throat and extra kind of tensing around this situation that I had." Once he noticed these patterns of tightening, he formulated an intention to change while at the same time accepting some lack of control, thus framing his intention as "asking." Note the expansive spatial elements of his intention, typical of many of the descriptions of Alexander technique-related practice.

> So, if I was feeling squeezing in my chest, or my throat, or pulling my head down, or my shoulders … asking to not have to do that so much, asking to give myself more space. … And then also sometimes thinking about direction, too. I'm lying down, asking gravity to go through me without … interference, to be fully supported by the bed. And think about … widening in these areas where I was contracting.

He later emphasized that "asking" goes beyond just "noticing."

> I'm no longer just noticing what I'm experiencing, but I'm actually asking to kind of change certain conditions in my body. So I might be thinking about, you know, forward and up, or I might be thinking about my shoulders releasing away from one another. … So in that case, I am … going beyond just noticing.

3.1.2.3. Complementarity of Alexander technique and mindfulness. Andy described using both Alexander technique and mindfulness to notice bodily reactions. For example, he described using Alexander technique to notice tension and postural reactions, specifically mentioning the chest, neck, throat, and shoulders. He described his mindfulness skill of letting go of catastrophizing in order to understand where he is tightening and let that go. Andy commented specifically on the complementarity of the two approaches.

> I could have had a lot of familiarity with my experience through mindfulness and maybe compassion for myself, which is important. But I … don't think I would have had the same doors to open … [to] reducing the secondary tension, the secondary distress [without Alexander technique].

Although the stressful experience Andy described was more extreme than that described by Isabelle (life-threatening vs. annoying), the way he relied on his mindfulness and Alexander technique tools to find a calm state was similar. He used his mindfulness training to identify the mental chatter that was contributing to the problem and to stop identifying with that chatter. He used his Alexander technique training to identify the commensurate patterns of muscle activation and ask for a change.

3.2. Themes

Thematic analysis of the entire data set yielded three main themes: finding space and time, skilled observation of oneself and one's environment, and asking for change/ maintaining an intention. These are listed in Table 1 and described below in detail with supporting excerpts from interviews.

Table 1
Themes and subthemes resulting from thematic analysis.

- Theme 1: Finding space and time
  - Prompts for finding space and time
  - How participants found space and time
  - Consequences of finding space and time
- Theme 2: Skilled observation of oneself and one's environment
  - A holistic approach
  - Observing the body
  - Observing thoughts
  - Observing the environment
- Theme 3: Asking for change
  - Asking not commanding
  - Intention

3.2.1. Theme 1: finding space and time

3.2.1.1. Finding space and time is essential to both disciplines. Participants described moments of gaining perspective on thoughts and emotions using spatial and temporal language (gaining distance, stopping, etc.). Participants associated these experiences equally with mindfulness and Alexander technique practice, and in many cases, they were unable to identify which practice was being applied at these moments. In other words, finding space and time is common to and essential for the practices of both disciplines.

We've categorized this theme into three subthemes: a) what prompted participants to find space and time; b) how participants found space and time; and c) consequences of finding space and time.

3.2.1.2. What prompted participants to find space and time?. When considering the stressful event they had chosen to narrate, participants recalled what prompted them to find space and time. They variously described experiencing loss of control, being in an emotional state, and an inability to understand what was going on emotionally. Terese described having to see a habitual reaction repeatedly before she could recognize it. "This was completely obscure to me, so I had to see it over and over again."

Often the signal that prompted an awareness of the need for finding space and time came from the body. Tamsin noticed that her heart rate is often "the first sign that I'm going into something that is reactive." Alma realized she "didn't need to tense up or become upset or pull (herself) out of shape." Agnes recognized that her "body wanted to calm." Lilian drew attention to the moment she realized she was lifting her shoulders. Andy's signal that it was time to stop was an awareness of "squeezing in my throat and extra kind of tensing around this situation… squeezing in my chest, or my throat, or pulling my head down, or my shoulders." Cara described how she had learned "to stay present to what was happening in my left hip, which was that it was tight, and it was kind of hurting." These were identified as either mindfulness or Alexander technique-related skills depending on the type of observation, as will be described in Theme 2.

3.2.1.3. How participants found space and time. References to space and time were used both literally and figuratively. Participants described literally pulling back in space from an activity, as well as creating space figuratively via "mental stepping back, or making space for what's happening" (Agnes) or "detaching from your thoughts . . . from your ego." (Tamsin). Participants described literal pauses in time such as a "pause for a minute" (Norman) as well as figurative shifts in time such as "I'm just slowing the time" (Roman). They mentioned gaining time to think, to be in the present moment, or to create a pause between stimulus and response. Often references to space and time, both literal and figurative, were mixed together in the same description. "I'm just upset … I really need to stop, just stop, you know, kind of step back a little bit, just for a little bit, because you're pulled into this tornado, that you don't control nothing (*sic)*." (Roman)

3.2.1.4. Consequences of finding space and time. Participants often described the immediate consequences of gaining distance. For example, Tamsin said, "I have the spaciousness to be able to detach and observe in the moment, rather than be completely reactive." Maria described this distancing as allowing her "to recognize what's happening in the present moment …. to really see." Cara said, "So there's an inhibitory moment there where we don't do something about it…. then we have the choice to redirect." In short, gaining distance sets the stage for other positive steps to be taken in the process of handling stressful situations, such as

putting immediate reactions on pause, making observations, withholding judgement, and choosing a response.

3.2.2. Theme 2: skilled observation of oneself and one's environment

Participants described observing themselves and their environment with attention to detail and to relationships. This observation process was critical to addressing the state of stress, providing participants a means of gaining perspective on stress-related thoughts, emotions, and physical reactions. The observation process was described as fundamental to both disciplines.

> When I use the Alexander technique for a particular activity, there is a period of gathering information about the activity, and gathering information about myself, and how I'm responding to that activity. And I believe that my practice of mindfulness lubricated the process of gathering information. (Katherine)

Below, we have divided this theme into four subthemes: Using a holistic approach to observation, observing the body, observing thoughts and emotions, and observing the external environment. Within each subtheme, participants described distinct similarities and differences in the attentional skills derived from each discipline.

3.2.2.1. Holistic approach to observation. Participants indicated that the two disciplines share a holistic approach to observation. This manifested in two ways. First, in a moment of stress, the participants described expanding their field of attention to observe a wide range of sensations, described by various participants as "expanded awareness" (Sara), "widening your attention" (Isabelle) and to "widen out your thoughts and focus" (Isabelle). In the narratives described in Section 3.1, in moments of stress, there are multiple examples of observation of thoughts, emotions, muscle tension, colors, space, and posture. Participants switched to an inclusive rather than exclusive mode of information gathering and considered a wide range of sensations and observations relevant to resolving the situation.

Second, participants described the interconnectedness of what happened, including physical (bodily sensations), psychological (thoughts and emotions), and external (colors, space, sounds) aspects. Participants referred to "the whole" or "the psychophysical" when encapsulating this idea. For example:

> Because of the training that I've had, there was very much an emphasis upon the whole… that unity, that psychophysical unity was quite prominent, really. I was aware of internal monologue, and me talking to myself and those sorts of things. I think the mindfulness training has brought that to the fore a little bit more. So it's perhaps just reawakened how fundamental that is to both techniques. (Isabelle)

3.2.2.2. Observing the body. While both Alexander technique and mindfulness encourage observation of bodily reactions including muscle tension, the two disciplines differ in the manner of attending to the body. Participants described mindfulness as encouraging a freely roving and non-judgmental focus with particular attention to local details. In the data, the mindfulness approach emerges as more inclusive than Alexander technique, allowing for non-judgmentally turning attention to any sensation. A mindful experience of tension might acknowledge the presence of tension without attempting to relate it to a larger pattern of muscle activation or deactivation. For example, Norman noticed how much specificity was added to his self-observation process after training in mindfulness:

> I think the body scan practice [from MBSR] has definitely deepened my understanding in the sense of the ability to move the attention, move the awareness, how flexible it can be. It can be on my big toenail, or it can be on all of me, or anything in between really. (Norman)

By contrast, Alexander technique training encourages attending to more specific, complex, global patterns of muscle activity and "distortions" and provides models for organizing these perceptions. In describing these patterns, participants used words such as "shortening", "narrowing", "scrunching", and "stiffening". They also described their muscle tension as having a direction using specific spatial references. In general, they referred to specific interconnected prototypical whole-body patterns of muscle activity and postural states. For example:

> In the Alexander technique, there's this clear sense of there being a pattern of pulling down. That was Alexander's big thing, I think, not just that we use unnecessary muscular effort when we respond to a particularly stressful stimulus …but that this has a response in terms of creating a pattern of distortions of the framework. There is a pattern and therefore once you begin to see and understand that pattern, you can kind of let it go. (Lilian)

This understanding of complex interrelationships was summed up by one participant this way: "Through the Alexander work, I understand basically how I'm designed…. It's almost like we get … a little instruction manual for our bodies when we take Alexander lessons." (Agnes)

3.2.2.3. Observing thoughts and emotions. Participants described mindfulness in particular as a way to develop skill in consciously interacting with thoughts and feelings, using phrases such as "acceptance" and "objective observation." They described thoughts with phrases such as "stereotypical thought patterns," "stories," and "narratives." Habits of perception were also mentioned, as were "tools" for addressing these habits. Viola described having "a new set of options to look at my thoughts and understand my mind." Not only did participants talk about internal narratives more often in the context of mindfulness, they often described specific means for interacting with thoughts (for example identifying a "top 10" of recurrent thought patterns (Terese) that they associated with mindfulness rather than Alexander technique. In short, participants expressed the opinion that mindfulness training promotes attending to thoughts and feelings as a highly refined skill that is developed over the long term with intentional practice.

> As I sat there, I kind of said, "This is panic. This is fear, oh, this is really scary. This is mental racing. And I just sort of noted what I was experiencing. That's a mindfulness-based thing that I've learned to do. (Agnes)

In this sense, some participants described mindfulness as filling in a gap in Alexander technique in moments of stress. "[In Alexander Technique] there isn't some acknowledgement of how busy our minds are" (Terese).

> Alexander, not so much. You know, we're not really working with thoughts, per se, although he was very interested in mental attitude, but he's not - he never really instructed people to let go of the narrative. So that's more meditation. (Grace)

3.2.2.4. Observing the environment. Both disciplines use attending to the environment as a means of reframing a situation, gaining perspective in general, and noticing one's relationship to the environment.

When describing mindfulness, participants mentioned noticing colors, sounds, smells, and tactile experiences – direct sensory experiences of the environment. Katherine described how she uses mindfulness to "receive more information through my senses about the smell of the trees, and the sound of the birds, and the temperature of the air." Terese described a similar attention to senses, in this case colors, when cutting carrots: "Watch what you're doing. See that you're cutting the carrots… really physically concentrate on the colors … carrots, cutting them; you're making a salad, look at the green of the lettuce, the color of the tomatoes, it's very sensorial."

By contrast, observation of the environment from an Alexander technique perspective was more likely to include elements of space and spatial relationships. This was reported by Maria as, "When I walk in such a big corridor, I'm always aware of a kind of spatial awareness above my head," by Norman as the ability to "begin to become aware of myself in space, myself occupying space" and by Terese as losing awareness of the back of her body and the space behind her: "I had lost my back." When describing stress during a Zoom session, Sara also emphasized the space behind her: "So I had to remind myself that I'm sitting in the room, and that there's something behind me and something around me, not only the screen." Sara described viewing her environment as an "experience of openness, expansion and looking at all experience that sometimes comes. Then life is a bit easier, much easier."

3.2.3. Theme 3: asking for change: maintaining an intention

In addition to the attentional skills described above, participants also described intentional skills for letting go of unnecessary elements of a stress response and for improving overall wellbeing, using terms such as "calming the mind", "releasing tension", "letting go of thoughts", "directing", and "unscrunching."

3.2.3.1. Asking, not commanding. Participants used words such as "asking", "requesting", and "allowing" – words that suggest a light, patient, and accepting approach – to describe how intentions are held in both Alexander technique and mindfulness. Arthur described his directions and intentions as "a wish." In the following example, intentions are contrasted with commands. This attitude of asking rather than commanding was described in the context of both disciplines.

> I would say it's an intention in which I try to let go of the outcome. You know, as opposed to a command, or demand (which I do plenty of the time with poor, poor results). But an intention that I have in the asking might be to allow, to not squeeze my throat or not tighten my jaw. That can be a kind of an asking. Or it could also be more in the mindfulness kind of camp, asking to allow my heart [to] kind of connect with this experience of fear or distress or excitement, or whatever it is, you know. So asking to kind of include more of a sense of compassion or heart, that would be an asking, also. (Andy)

3.2.3.2. Intention in Alexander technique practice. Descriptions of the Alexander technique included a particular kind of asking, referred to by many participants as "directing", "directed allowing", and "directions". Similar to other intentions mentioned, directing was generally described with words such as "asking," "allowing," or "freeing." In other words, directions were not forced movements or behaviors. Directing was described with specific recurring anatomical, geometric, and relational terms. Participants often identified directing as a skill unique to Alexander technique. The anatomical terms often described allowing for space within or between body parts, and they were often tensional or tonal, in that they described letting go of stiffness and/or freeing up areas for movement.

> And then the difference is, I think the directions. In mindfulness, I haven't learned about directions. … We talk about it in the Alexander technique as sending the messages from the brain to allow more space to undo the grabbing and tightening. (Maria)

Agnes said, "Something unique I think to Alexander's work is this intentional, directed allowing, you know, 'My shoulders are free to let go and be wider.'" She went on to demonstrate this intentional practice during the interview, saying "I can release my knees away from my hips right now. And oh, my thigh muscles let go just a little bit."

Direction was also described as a specific "path" for release of tension based on an understanding of certain anatomical relationships; these paths were described as absent in mindfulness practice.

> But the unique thing about Alexander work is, I could have said, Oh, yeah, I'm feeling really tight in my thighs and, and all that. Just relaxed thighs. Yeah, sure. And that's what people usually do, right. But through my Alexander work, I understand, basically, how I'm designed. And so I know that if I give the release of that tension a direction and exit path, you might say, that works really well for me. (Agnes)

Participants noted that directing served as a useful coping mechanism, a means of letting go of persistent stress-related responses that were no longer useful. This would lead to changes such as reductions in hyperfocus, deeper breathing, and easier movement.

> [You use] the stopping and the redirecting to give yourself a new sensation of, "Hey okay, I'm coming out with more in my back," or, "Oh yes, it gives me a bit more air or breath, or a bit more freedom in shoulders and the neck when I'm washing the dishes." So in these situations, it's a very accessible and quick tool to assess your balance and posture and coordination to redirect yourself into a kind of more free balanced coordination. (Maria)

3.2.3.3. Intention in mindfulness practice. Descriptions of intentions in mindfulness practice fell into two categories. The first category included descriptions of how objective observation by itself could create desirable changes. The second category included descriptions of specific goals for mindfulness practice.

In the first category, participants described how objective, detached observation of an undesirable thought, emotion, or area of muscle tension, with no intention to change, can trigger the dissipation of the undesired state. Lilian described this as, "The noticing often means that there is letting go." There were numerous descriptions in which, while it was clear that a desired change was sought and effectively carried out, a lack of outright intention was the essential component to this process.

> I think what I'm learning recently is that by noticing it, and staying with it, rather than running to the next thing, it dissipates. And I'm new at that. But that's something that I'm working on right now - staying with the sensations and noticing that they don't go away, but it takes it down a notch when you notice the sensations … without my mindfulness practice, I wouldn't have that kind of control. … If I didn't have that mindfulness training, I honestly could not tune in - my mind wouldn't be spacious enough to tune in to this, to those feelings. (Tamsin)

In the second category, participants named specific larger behavioral and psychological goals associated with mindfulness practice. Examples of such goals included "compassion", "reflection", "moderation", and awareness of a "bigger picture". For example, Lilian described how the intention towards "embodying compassion" allowed her to process a stressful teaching experience. "I decided to kind of sit with one of the Mindfulness-based Compassionate Living practices embodying compassion in relation to this group of students. I think that … was helpful and the relationship is progressing." (Lilian)

In another interview, Sara described how meditation allowed her to gain a larger psychosocial perspective on a potentially stressful event as a means of reducing pressure on herself. In this case "doing good" and "not expecting too much" of oneself can be considered intentions.

> I had to have a bigger picture, like this is something useful to do. I'm doing this for a whole group of people, it wasn't even [for] payment or anything. … I think the meditation helps me to get out of this limited perception of 'this is about myself doing something' to 'this is a group of people and let's do it together.' So, that was very helpful. Also, moderation, I think as a result of meditation practice; not expecting too much of myself, which includes also, to be open to fail, to make mistakes. (Sara)

3.2.3.4. Complementary intentions. In general, participants commented that Alexander technique directing provided a more active means to reorganize stress-related reactions, while mindfulness was less directly intentional and more observational in the moment.

> Alexander technique is more connected to a given end. … There is a goal or purpose or a desire. And if I'm practicing seated meditation to a certain degree, I'm opening to an experience of being alive that isn't directly tied to an end, goal or purpose or a particular result. (Katherine)

For several participants, the way they applied Alexander intentions did not allow sufficient time and space for self-acceptance in moments of stress. The de-emphasis of intention and increased emphasis of acceptance learned through meditation helped.

> I still had some situations in which I felt quite stressed. And I didn't understand it because I was stopping and directing, so I shouldn't feel all that stress…. Then when I started to meditate, and to become more involved in mindfulness, I started to open up more to feelings and sensations that were actually there in that stopping moment. So I think I developed a bit, from the stopping but not really seeing, to stopping and allowing things to rise and come up and to accept what was there–to accept myself as being a human being, who can be quite stressed in certain kinds of situations. (Maria)

For one participant, this element of mindful self-acceptance allowed them to overcome specific difficulties in their Alexander technique training.

> I felt a lot of pressure and expectation. So, it really took a lot of work for me to really equate it with letting go of the outcome, you know, and I think that really came from the mindfulness world for me. Because in my training, there was a lot of emphasis on reorganizing your body as a goal. That's what we're doing here. Like, that's what it seemed. Whereas mindfulness was, you being who you are, is the goal. And so, you don't have to improve upon yourself. And I think if I didn't have that message, hearing it a zillion times, I probably would have quit the Alexander technique. (Andy)

On the other hand, participants also commented that mindfulness could at times be too observational without providing an active means of rectifying a stressful situation. Alexander technique complemented mindfulness by providing a more intentional component. Cara commented that, "I would say actually, that with mindfulness, you don't really know what to do. Something is bothering you. You're just aware of it. With Alexander, you might know what to do." Others went into more detail:

> If you have a chronic pain in your back, and the [mindfulness] instruction is to be aware of your body, over and over again, it's very hard to not become like obsessed, you know, with that part of you; you know, it's quite easy to just have all your attention going where the fire alarm is going, kind of getting pulled, like where the chronic pain is, or where all the distress is. And I found for me, that bringing my awareness to an experience of very intense suffering is overwhelming; it would be overwhelming, I would be flooded, it would have kind of poor negative consequences, actually. But being able to use the Alexander technique is a way of getting some perspective, working with the whole structure of my body, seeing myself more as a whole, as opposed to just the part that's in pain or in distress. I think that yes, without the Alexander technique … I don't think I would have had the same doors to open, kind of like reducing the secondary tension, the secondary distress. (Andy)

In general, participants communicated that the two disciplines' intentions filled each other's gaps.

4. Discussion

This study documents how mindfulness and Alexander technique provide resources for self-regulation in the face of stressful life events. The interview structure enabled participants to reveal subtle nuances of their expertise and share their specialized knowledge [70]. This collaborative process allowed them to theorize using their expert knowledge, as they discerned which discipline they were using, how the two worked together, and how they were different. Participants seemed comfortable to go beyond the interviewers' questions to find their own means of deepening the conversation, for example demonstrating techniques in real time in the interview and posing questions to the interviewers. Findings emerged from the analysis of interviews with practitioners of both disciplines describing a synergy between the two sets of practices.

4.1. Themes

Thematic analysis identified three key themes:

4.1.1. Finding space and time

Participants described a process of gaining time and distance from their reaction to a stressful event, both metaphorically and literally. This shift in perspective, often initiated by noticing physical sensations such as rapid breathing, a racing heart, or tight muscles, allowed individuals to step back from the situation. Participants in the study described this process using spatial and temporal language, like "creating space" or "slowing down time." They ascribed multiple benefits to this process. For example, it allowed practitioners to pause before reacting impulsively, observe their thoughts and feelings without judgment, and to gain a clearer understanding of the situation at hand. Ultimately, this perspective empowered individuals to make conscious choices in stressful moments, rather than being controlled by their initial reactions

The concept of stepping out of the automatic flow of a moment has been studied in many ways. Recently, Bernstein et al. [71] reviewed many such models, which have been referred to as "metacognitive awareness", "cognitive distance", and "reperceiving" depending on the author and context. They summarize these results under the rubric of "decentering," which they describe as "the capacity to shift experiential perspective–from within one's subjective experience onto that experience" [71].

While it is beyond the scope of this paper to map participants' experiences precisely onto theoretical models of decentering-related phenomena, it is worth highlighting a few points. First, the intermingling of spatial and temporal language while describing decentering supports the idea that metaphors in time and space may emanate from the same mental processes. This is described for example by Liberman [72] in the context of psychological distancing. Second, participants were not just describing space and time metaphorically but also literally, for example by physically noticing the space behind them or pausing–literally taking time–in the activity. This suggests a level of embodiment in these practitioners that may go beyond typical descriptions of decentering skills. Third, participants mentioned specific events that initiated decentering, often involving heightened awareness of physical sensations. Such reports highlight the possibility that skillful observation of the self and one's environment may play a critical role in activating the decentering process.

4.1.2. Skilled observation of oneself and one's environment

Training in both disciplines develops proficiencies in objective, constructive observation of oneself in the environment as a key coping mechanism. Observation was described as broad in scope, incorporating information about the whole body, the flow of thoughts, and details of the environment. In general, this expanded quality of observation heightens a practitioner's ability to gather information about a situation and thereby leads to a better-informed response [73,74].

The ability to maintain attention on the present moment, especially in the face of a stressful situation, can be developed [75]. Ruminating about the past or catastrophizing about the future may dominate one's attention and distract from observation. Redirecting attention back to the present moment requires active executive attention. Participants' descriptions indicate that training in both disciplines develops this skill.

And yet, the interviewees made clear that the two types of training develop different qualities of present moment awareness. Mindfulness encourages a broad, non-judgmental awareness of thoughts, emotions, and physical sensations as well as specific sensations from the environment such as color, smell, sounds, and tactile sensations. Alexander technique, by contrast, tends to emphasize structured observation of physical tension, specific patterns of muscle activation and posture, and a more spatial awareness of the environment [32,55,76].

These results suggest that the shared proficiency of the two disciplines in supporting present moment awareness is in fact quite different in application. It seems that each discipline applies a particular lens through which the body, mind, and environment are viewed. This suggests that there may be discipline-specific strengths, perhaps related to their different intentions, such that combining disciplines might expand opportunities for intentional change.

4.1.3. Intentional change

Participants' descriptions of intentional change often employed terms like "asking," "requesting," and "allowing." This language suggests a fundamental level of acceptance-based thinking in both disciplines, presumably reducing emotional reactivity, broadening awareness, and facilitating maintenance of an intention [77]. Incorporating an accepting attitude even when intending change can be thought of as a skill promoted by both mindfulness and Alexander Technique practices. That said, the two disciplines differed in the content of their intentional thinking.

Within Alexander technique, participants often used specific anatomical, geometric, and relational terms to describe intentions to relieve stiffening and create space within or between body parts. In this way, Alexander technique offers a specific intentional practice for creatively managing many common stress-related musculoskeletal responses [55,78–80].

Within mindfulness, participants discussed how objective, detached observation of an undesired thought, emotion, or area of muscle tension, without attempting to change it, could lead to the dissolution of the undesired state - an apparent paradox that has been remarked upon previously [81]. Participants also identified larger behavioral and psychological goals associated with mindfulness practice, such as cultivating compassion, reflection, moderation, and an awareness of "the bigger picture".

One way to summarize these findings is to categorize mindfulness as the more acceptance-based strategy and Alexander technique as the more change-based strategy [82]. Participants described mindfulness as less judgmental and more passive, and Alexander technique as more active in assessing harmful habits and initiating specific changes. Such a framing also provides a context for explaining the reported gaps in each discipline. For example, some participants speculated that mindfulness did not provide properly actionable steps for addressing stress states (in other words it was too passive). This is consistent with critiques in the literature that mindfulness may inadvertently encourage a passive acceptance of experiences, potentially hindering active engagement in problem-solving [83] or reducing a healthy sense of motivational relevance [84]. On the other hand, some participants perceived the Alexander technique as potentially overly focused on achieving specific goals, which could sometimes lead to self-judgment. In contrast, mindfulness appeared to facilitate a more accepting and non-judgmental approach to observation. Within this framing, these results exemplify how acceptance-based and change-based strategies can be combined synergistically [82,85].

4.2. Dual discipline expert interviews

Various qualitative interview techniques have been used to identify commonalities between mind-body disciplines [15,52,86,87] and are well suited to gather information about how experts perform tasks and solve problems [70,88]. Other studies, for example of diverse meditation practices, have surveyed large groups of experts, some of whom have had experience in multiple techniques, in an effort to characterize the diversity of techniques and proficiencies, where they overlap, and where they differ [23]. However, none of these approaches attempts to capture the experience of multiple disciplines operating in one practitioner at one moment. To the best of our knowledge, this dual-discipline expert approach is novel in qualitative research of mind-body disciplines.

Dual-discipline experts proved themselves able to provide detailed descriptions of similarities, differences, and complementarity of the two disciplines in application. Consider for example something as specific as skilled first-person observation of muscle tension. While this might seem like a single well-defined technique, dual discipline experts were able to describe discipline-specific differences in how this technique was learned and applied. Similarly, interviewees described specific differences in how each discipline encouraged observation of the environment. Such results indicate that hidden within a shared technique or proficiency, such as first-person observation, may lie many layers of discipline-specific skills. This nuance would not be visible to a single-modality expert.

Dual discipline experts can also clearly describe the relative emphasis of different disciplines. For example, while both disciplines emphasize broader themes of acceptance and change, dual discipline experts could articulate the relative level emphasis on each, thereby clarifying how each discipline functions in practice. Dual discipline experts are uniquely qualified to provide these sorts of insights that might otherwise be overlooked.

Dual discipline experts were also able to avoid discipline-specific terminology (jargon) that might otherwise paint over the finer details of practice. Viewing their own experiences from the perspective of two different disciplines encouraged them to expand their choice of language outside of a single tradition when describing or analyzing their experiences. One example of this could be found in the challenge of describing how "directing," an Alexander technique practice, compared with embodied mindfulness approaches. Participants found creative ways of identifying the unique characteristics of this practice, thereby escaping the confines of the discipline-specific term and allowing for a clearer comparison of approaches.

4.3. How this information can inform existing theories

While models for the mechanisms of mindfulness and Alexander technique have been proposed, there is no single agreed-upon model for either discipline. When describing various proposed frameworks for mechanisms regarding mindfulness, Gu et al. [5] list self-regulation; emotional, cognitive, and behavioral flexibility; values clarification; exposure; self-awareness; self-transcendence; relaxation; nonattachment; and non-aversion. Additionally, within these frameworks the specific priorities of attention and intentions are not always clear [89]. Regarding Alexander technique, research has highlighted the importance of spatial attention and intention to affect muscle tone and body schema [50]; the influence of physical well-being on psychological well-being and the experience of mind-body integration [52]; and "learning about the self, conceptualized as a mind–body unity" [51]. Participant reports are consistent with these models of mindfulness and Alexander technique. For example, participants made numerous references to acceptance, self-regulation, muscle tension (tone), and the body in space (body schema).

Our research suggests that future frameworks for both disciplines could benefit from identifying specific sub-skills through comparisons across various mind-body practices. While Alexander technique and

mindfulness both take a holistic approach, the specific techniques and proficiencies of each differ in ways that are not always apparent to the outsider. For example, it has often been claimed that Alexander technique practitioners work with non-physical habits [52,53,90,91]. This is consistent with many participants' descriptions of Alexander technique practice in this study. Likewise, mindfulness practitioners often observe body-oriented phenomena such as muscle tension. Furthermore, an awareness of mental and physical states may be highly intertwined [92], with each skill supporting the other. When asked to compare the two disciplines in practice, participants in our study consistently identified Alexander technique's more nuanced approach to the body and mindfulness' more nuanced approach to internal narratives. Such insights are essential for describing general terms like "holistic" and "mind-body" with more discipline-dependent specificity. Detailed descriptions of these techniques and proficiencies via dual expert practitioners can elucidate critical features of each practice, thereby informing future theoretical models.

4.4. Limitations and future directions

The substantive findings open up possibilities for further fine-grained qualitative exploration and quantitative studies. While using expert interviewers allowed for in-depth interviews, this approach may have shaped the identification and interpretation of themes.

These findings are specific to a particular group of dual-discipline experts, who demonstrated a unique ability to articulate details of each discipline in relation to the other. Practitioners who chose to participate in this study might have had a particular interest in the integration of MBAs and Alexander technique, potentially skewing the results toward those who already perceive synergy between the two practices.

In addition, the study was not designed to predict whether non-trained populations would experience clinically significant synergistic benefits from short-term exposure to both methods. Follow-up studies with multiple groups and an intervention design could test whether combining the two practices would provide clinically significant benefits with respect to stress management.

5. Conclusion

Combining mindfulness and Alexander technique creates a powerful toolbox for stress management, according to experts trained in both practices. Both disciplines teach skills in managing unhelpful thoughts, emotions, and patterns of muscle activation using skills such as decentering, body awareness, awareness of the environment, and intentional practices to calm the stress response. The differences lie in the relative emphasis and specific implementation of these skills. In general, mindfulness provides a more nuanced approach to navigating internal narratives and emotions, while Alexander technique provides more developed tools for recognizing and addressing patterns of uncoordinated muscle tension and postural support. A unique strength of this study lies in its focus on dual-trained experts who shared insights into how these disciplines work both in isolation and synergistically by comparing the experiences of both disciplines in action. This methodology, based on practitioner experiences, offers potential insight into comprehensive stress management interventions and for understanding mind-body disciplines in general.

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Declaration of generative AI in scientific writing

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Data availability

For ethics reasons the raw data for this study is not available.

CRediT authorship contribution statement

Patrick M. Johnson: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data curation, Writing – original draft, Writing – review & editing, Supervision, Project administration. **Gabriella Minnes Brandes:** Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data curation, Writing – original draft, Writing – review & editing, Project administration. **Victoria Door:** Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data curation, Writing – original draft, Writing – review & editing, Project administration. **Rajal G. Cohen:** Conceptualization, Writing – review & editing, Supervision, Project administration.

Declaration of competing interest

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