



RESEARCH
ARTICLE

Unexpected Extemporaneous Anomalous Reactions (UNEARs) and their Relationship with Meditation

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ABSTRACT

The beneficial effects of meditation have attracted increasing scientific interest, particularly regarding the mechanisms through which this ancient practice may contribute to health recovery and maintenance. Nevertheless, despite the broad range of benefits attributed to meditative practices, the literature also reports numerous unusual experiences related to meditation. This study describes reports from three novice practitioners of meditation who experienced unexpected reactions, including headache, sudden sialorrhea, sudden heat in the body, drowsiness, feeling indisposed, an increase in anxiety and aggressiveness, jealousy, crying episodes, a desire to discontinue meditation practices, feeling faint, anguish, and fear of consciousness leaving the body, among others. These reactions are referred to here as “unexpected extemporaneous anomalous reactions” (UNEARs) — a phenomenon linked to the multidimensionality of the Being that may, in some cases, result from the confrontation between the practitioner and the Self shaped by an individual’s life experiences over time. With basis on qualitative data collected from semi-structured meditation diaries containing three open-ended questions that allowed practitioners to describe in detail any experienced reactions, and considering empirical observations of several dozen novice practitioners in previous meditation courses, the current study aims to propose an etiological hypothesis comprising three inducing factors that may act as “triggers” of UNEARs: (I) failures in the execution of the exercises, (II) the adaptation of the Being’s multidimensional body to meditation, and (III) the “unearthing effect” of meditation. These factors may contribute to the development of further rigorous investigations into the possible existence of a subtle human anatomy composed of *chakra* systems and *nadis*, as well as its relationship with anomalous experiences associated with certain holistic and alternative practices.

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Meditation, Unexpected Extemporaneous Anomalous Reactions (UNEARs), Mind-Body, Non-Ordinary Experiences (NOEs), Subtle Energy.

INTRODUCTION

The benefits attributed to meditation have been widely described in scientific literature and are commonly associated with the recovery and maintenance of health, as well

as improvements in quality of life. As a result, meditation has gained widespread popularity worldwide, a phenomenon further amplified by media dissemination. Despite this favorable scenario, it is important to note that, since the 1960s, researchers have also highlighted the potential



risks of meditation (Deikman, 1963; Epstein & Lieff, 1981; Shapiro Jr, 1992; West, 1979).

Over the past decade, a growing body of research has documented unwanted effects (Cebolla et al., 2017), unpleasant experiences (Dudeja, 2019; Schlosser et al., 2019), adverse events (Farias et al., 2020), adverse effects (Lambert et al., 2023; Pauly et al., 2022; Szaszko & Tran, 2025), negative effects (Sparby & Sacchet, 2025), and unusual experiences (Van Dam et al., 2025) related to meditation practices. Increasingly, these studies have raised concerns about both the effectiveness and safety of meditation as a therapeutic intervention for various clinical conditions, including psychiatric and psychological disorders.

Although hypotheses concerning the etiology of these events and their causal relationship with meditation remain scarce, several authors have provided important insights that contribute to a more comprehensive understanding of the phenomenon. Early studies suggested that the negative impact of meditative practices on health may be related to over-meditation of long-hour sessions (Carrington, 1977). However, more recent evidence indicates that even a short meditation session may reduce motivation to engage in both mundane and enjoyable tasks (Hafenbrack & Vohs, 2018) and may also produce negative consequences in the moral domain by attenuating harm-based moral reactions (Schindler et al., 2019). Taken together, these findings suggest that the potential risks related to meditation may be independent of practice duration, whether measured in minutes, hours, weeks, months, or years.

One of the most intriguing questions surrounding meditation is “*why some practitioners experience unpleasant effects during or after practice, whereas others do not.*” Considerable attention has been devoted to determining whether such outcomes are linked to the type of meditation (Cebolla et al., 2017; Szaszko & Tran, 2025), individual differences (Buric et al., 2022), prior clinical history (Graser & Stangier, 2018), or non-clinical conditions (Lambert et al., 2023). More recently, the scientific community has expressed increasing concern regarding this issue, leading to proposals for the development and validation of assessment inventories designed to evaluate a broad range of meditation-related experiences (Van Dam et al., 2024; Wilkinson et al., 2023).

This field of scientific inquiry remains vast, allowing for the development of new paradigms that may contribute to a deeper understanding of phenomena of such magnitude linked to meditation. In this sense, the current study

describes unexpected reactions reported by three novice meditation practitioners who attended one of the meditation courses offered at the University of Brasília, Brazil, between 2007 and 2013 (Camelo, 2011; Fernandes, 2010, 2016). These reactions were documented through qualitative data derived from participants’ meditation diaries. To mitigate or eliminate such reactions during the course, participants received support from an experienced instructor who implemented tailored intervention strategies based on the issues reported.

Additionally, the present study includes examples of both pleasant and nuisance reactions identified during empirical observations of other novice practitioners who attended meditation courses of the same offered modality, and from some Brazilian medical students who took meditation classes between 2018 and 2019 and evaluated the quality and relevance of meditation in medical education (Fernandes, 2023). Further examples were drawn from reports provided by undergraduate students from various academic fields enrolled in the course *Meditation: Theory and Practice* at the Faculty of Medicine of the University of Brasília, from 2024 to the first half of 2026. These participants attended classes in which they practiced *Meditation with Intentionality* (MI), a meditation modality developed by the author of the present article. Briefly, this modality primarily involves the use of controlled breathing techniques aimed at quieting the mind, combined with the deliberate use of intention-driven thoughts to promote mental balance. These components are intended to support students in taking initial steps toward the development of self-knowledge and self-transformation.

The association between meditation and the emergence of various nuisance reactions does not necessarily imply that this ancient practice—whose primary aim is to promote well-being and support individuals’ spiritual development—is a major cause of physiological or psychological imbalance. Rather, such reactions may be related to factors including the misuse of meditation, insufficient instructor expertise regarding its full range of effects, and, importantly, a lack of consideration of individual differences, such as personality traits, religious beliefs, atheism, or skepticism, and how these factors influence individuals’ responses to meditation.

The first aim of this study is to propose that reactions commonly described as pleasant or unpleasant, unwanted, adverse events or side effects, as well as unusual or anomalous experiences, may be conceptualized as Unexpected Extemporaneous Anomalous Reactions (UNEARS). These

reactions constitute a common phenomenon that manifests across physical, mental, and spiritual dimensions, presenting as signs or symptoms that may arise during or after meditation practices.

Given that this phenomenon may occur in both novice and experienced practitioners, regardless of the meditation modality, and considering that the qualitative approach adopted in this study enabled three novice practitioners to report their experiences in detail through meditation diaries, the second aim is to propose an etiological hypothesis. This hypothesis comprises three potential inducing factors underlying the relationship between UNEARs and meditation: (1) failures in the execution of exercises, (2) adaptation of the Being's multidimensional body (physical, mental, and spiritual) to meditation, and (3) the "unearthing effect" of meditation.

CONCEPTUAL CONSIDERATION OF UNEARS

UNEARS are reactions that manifest across the multidimensionality of Being (physical, mental, and spiritual) in response to stimuli arising from holistic practices, among others. The term UNEAR was coined to encompass a range of reactions related to meditation (Lindah et al., 2017), yoga (Cramer et al., 2019), acupuncture (Xu et al., 2023), and hypnosis (Gruzelier, 2000).

These reactions are considered anomalous insofar as they deviate from commonly expected patterns of experience. They are described as extemporaneous because they may arise prematurely or at inopportune moments, including during the early stages of an intervention, such as the first weeks of meditative practice. They are characterized as unexpected because their occurrence during or after meditation is independent of any prior manifestation of will or thoughts endowed with intentionality. Therefore, these reactions are not necessarily generated by self-induction or expectation. Lastly, these reactions may be associated with behavioral changes and processes related to the development of the Self at different stages of individual experience. Overall, in the specific context of meditation, such reactions are not typically aligned with the predefined goals of daily practice and may emerge within a few days among novice practitioners or also occur in experienced meditators.

UNEARS can be classified as either pleasant or nuisance reactions. Pleasant reactions represent the beneficial effects of meditation manifested across physical, mental, and spiritual dimensions, including improvements in breathing, attention, and concentration; reductions in

pain, stress, and anxiety; the development of patience, tolerance, and altruism; and increased feelings of loving-kindness and peace.

Nuisance reactions, in contrast, manifest as signs or symptoms that, at least initially, may evoke feelings of mistrust, insecurity, or even fear in practitioners. These reactions can be further subdivided into those of a pleasant or unpleasant nature. Reactions of a pleasant nature may be interpreted as beneficial or pleasurable effects of meditation, yet they may sometimes be accompanied by feelings of insecurity and/or fear. For example, practitioners with their eyes closed may unconsciously visualize beams of light, colors, or luminous figures of various forms during practice, or may feel as though their consciousness is leaving the body.

Based on the empirical observations of the present study, some practitioners reported out-of-body experiences or entering altered states of consciousness (i.e., meditative states), during which they described extra-physical journeys to previously unseen places. In both cases, such experiences occurred during simple, controlled breathing exercises aimed at quieting the mind. Although pleasant, these reactions may be unprecedented for some practitioners, and reports of fear are therefore common. Out-of-body experiences have been reported among Chinese Buddhist monks and nuns (Chen et al., 2011). However, it has also been proposed that such phenomena may reflect mystical states associated with endogenous neurochemical processes, such as the synthesis of the hallucinogen 5-methoxy-dimethyltryptamine (DMT) (Newberg & Newberg, 2005), or a failure in the temporo-parietal junction (TPJ) (Blanke & Arzy, 2005).

Nuisance reactions, particularly those of an unpleasant nature, may manifest in the physical body in several ways. The most commonly reported include increased blood pressure, tachycardia, sudden sensations of heat, sweating, and pain. In the mental sphere, these reactions may appear as anxiety, depression, anguish, and anger, among others. Such responses often lead to behavioral changes. However, despite their seemingly harmful nature, their occurrence calls for a broader and more holistic interpretation. In some cases, they may represent a stage in the practitioner's spiritual and behavioral development. Of particular note are the reactions that arise when the practitioners experience a UNEAR related to the process of self-knowledge. Such reports are common among individuals who feel shocked upon encountering their Self as revealed through meditation.

INDUCING FACTORS IN THE ETIOLOGY OF UNEARS IN MEDITATION

Recent investigations into meditation-related experiences have focused on the characterization of adverse or unpleasant effects in psychological settings (Lambert et al., 2023) and psychiatric contexts (Goud, 2022; Tamlinson & Malhota, 2024). Notably, a potential association between meditation practices and depersonalization phenomena has been suggested (Cebolla et al., 2017; Lindahl & Britton, 2019; Lindahl et al., 2019). Within this context, several outstanding questions warrant systematic investigation. Specifically, which forms or techniques of meditation may facilitate the emergence of UNEARs within the mental domain? Furthermore, given the heterogeneity of unusual meditation-related experiences, are there identifiable precipitating or moderating factors that selectively contribute to the occurrence of UNEARs across distinct experiential dimensions of Being?

The identification of potential inducing factors related to meditation constitutes an important area for further scientific investigation. Despite its limitations, the present study suggests a possible causal relationship between the UNEARs phenomenon and the inducing factors outlined below. This proposal is supported by systematically collected experiential data documented in meditation diaries, the intervention strategies employed by the meditation instructor to mitigate or eliminate these reactions, and the observed outcomes of these strategies.

Failures in the Execution of Exercises and Their Impact on the Subtle Anatomy of the Being

The concept of a “subtle anatomy of the Being”, comprising the *chakra* system and *nadis*, has been described within traditional and theoretical frameworks (Bruyere, 1994; Motoyama, 1981), often in association with physiological structures such as glands and organs of the physical body. According to these teachings, *chakras* are understood as vital centers responsible for the absorption and distribution of subtle and vital energy, whereas *nadis* are described as subtle channels through which this energy circulates within the subtle body, analogous—at least conceptually—to blood vessels (vascular networks). This form of energy is variably referred to in the literature as *prana*, *ki*, *chi*, biofield (Belal et al., 2023), biometenergy (Castellar et al., 2014), life energy (Rosch, 2009), or as a universal life force or an energy principle (Ramacharaka, 1904), among other terms. Within these perspectives, such a vital force is often regarded as a

fundamental principle underlying the generation and organization of the material world, encompassing both inanimate and living systems.

Chakras and *nadis* are thus conceptualized as interactive interfaces linking physical, mental, and spiritual dimensions, contributing to the maintenance of systemic balance through the regulation of subtle energy flow. It has been proposed that *chakras* may influence physiological processes and overall health status. In this context, imbalances or deficiencies in these energy systems have been suggested to be associated with the development of pathological conditions (Huang, 2020, 2021a, 2021b, 2022; Jadon & Sharma, 2025; Marathe & Acharya, 2020).

In addition to established health-related factors—such as regular physical activity, adequate nutrition, and supportive social relationships—certain theoretical perspectives propose that the maintenance of the functional integrity of the seven primary *chakras* may contribute to overall well-being. From this standpoint, the proper functioning of these centers is considered relevant to the maintenance of physical, mental, and, where applicable, spiritual health. Accordingly, Table 1 summarizes the proposed relationships between the *chakras* and the multidimensional aspects of Being, considering both conditions in which these centers are described as operating in a balanced and integrated manner and states characterized by functional imbalance.

The collected data contributed to the identification of UNEARs manifested by practitioners of a specific meditation modality involving breathing and visualization techniques aimed at quieting the mind and directing *prana* toward selected targets according to intentional focus. In addition, participants underwent structured meditation training designed to facilitate the activation and rebalancing of the *chakra* system (Fernandes et al., 2012). Difficulties in the accurate execution of these practices were frequently observed among novice practitioners, particularly in exercises involving *chakra* activation. Within the theoretical framework adopted in this study, *chakras* are conceptualized as components of a multidimensional system involved in the recovery and maintenance of health. From this perspective, an imbalance in one *chakra* may influence the functioning of others, potentially disrupting the overall dynamics of the subtle-body system. For instance, practitioners may inadvertently overstimulate specific *chakras* or fail to adequately activate those considered foundational within the prescribed sequence of practice.

The isolated hyperactivation of a single *chakra* is sufficient to cause the disruption of the *chakra* system,

Table 1. A Brief Description of the Relationship between the Seven Main Chakras and the Human Physical, Mental, and Spiritual Dimensions.

Chakras	Dimensions and harmonious functioning of the <i>chakras</i>			Dimensions and imbalances in the functioning of the <i>chakras</i>		
	Physical	Mental	Spiritual	Physical	Mental	Spiritual
First <i>chakra</i>	Excretion and locomotion; metabolism; regulation of the kidneys, bladder, genitals, colon and rectum. Glands: adrenals	Practical meaning of life; sense of administration and realism; well-defined and creative ideas; ease in communicating and expressing oneself clearly; willpower; control of materialism; family support.	Spiritual discernment; understanding of one's own existence and significance, as well as that of other living beings; distinction between mysticism and reality; and analysis and acceptance of life adversities.	Adrenal dysfunctions; urinary disorders; hemorrhoids; varicose veins; lower back pain; nephritis; cystitis; irritable bowel syndrome; and gastrointestinal disorders.	Difficulty expressing oneself in a creative, spontaneous, and flexible manner; lethargy, fatigue, depression, anxiety, fear of change, fear of abandonment by family, friends, or spouse, and fear of loneliness; and the development of aggressive behavior.	Greedy; avarice; excessive gullibility; material addictions; denial of feelings, emotions, and non-tangible dimensions of reality; tribalism and fanaticism; and excessive materialism.
Second <i>chakra</i>	Reproductive organs; kidneys; ureters; bladder; urethra; rectum; and pelvic structures innervated by the lumbar plexus. Glands: gonads.	Creativity; security; courage; sexual equilibrium; risk-taking and decision-making abilities; self-defense and self-protection; and emotional balance.	Ethics and honor in affective and professional relationships; mastery over passion and selfishness; independence of consciousness; and social and sexual pleasure at a balanced level.	Genitourinary and obstetric disorders; sexual dysfunctions; pathological alterations of the uterus, ovaries, and bladder; urinary incontinence; lower back pain; arthritis; and menstrual disturbances.	Aggressive personality; exaggerated and fantasy eroticism; hyperactivity; verbiage; impulsivity; lack of creativity; envy, lust, jealousy, promiscuity; difficulty in communication.	Tendency to self-destruction and collective destruction; possessiveness; envy; lust; feelings of guilt and accusations; overly sensitive.
Third <i>chakra</i>	Digestive system; peritoneal cavity; diaphragm; muscles of the thoracolumbar and abdominal region; structures innervated by the solar plexus. Organs: liver, pancreas and spleen.	Self-esteem; self-discipline; storage center for subtle and vital energy in the form of thoughts, emotions, and feelings; regulation of emotions and feelings stored within it; and relationship with sensations of pleasure and pain.	Understanding of diverse thoughts, ideas, and cultures; sensible interpretation of life adversities; generosity, ethical awareness, strength of character, and respect for others; and awareness of the Self associated with spirituality.	Decreased diaphragmatic mobility; digestive system disorders; diabetes; obesity; flatulence; abdominal distension; bowel obstruction; chronic fatigue; and pain in the lower thoracic spine.	Loss of behavioural/emotional control; depression; claustrophobia; low self-esteem; rigid and stubborn thoughts and beliefs; resistance to change; compulsive seduction; affective dependence; fear of rejection; exaggerated sentimental density.	Egocentric personality; heightened sensuality and sentimentalism; excessive compassion; self-punishment; need to conquer everything and everyone; arrogance; thirst for power; need to be the center of attention; exaggerated sexual fantasies; and heightened importance attributed to physical appearance.
Fourth <i>chakra</i>	Lungs; heart; thymus; shoulders; breasts; arms; hands; brachial plexus; ribs; clavicles; thoracic vertebrae; and the immune system. Gland: thymus. Organ: heart	Empathy and sympathy; discernment; natural leadership oriented toward collective well-being; insight; emotional balance; serenity; and positive mental attitudes and habits.	Awareness of the Self; discernment between intellectual and spiritual intelligence; altruism; generosity; hope; remorse (recognition of mistakes); and romantic, agape, noble, and unconditional love.	Respiratory and cardiovascular disorders; hypertension; impairments of the shoulders, hands, arms, and vertebrae; breast disorders; sleep disorders; shortness of breath; tachycardia; tremors; and immune system dysfunction.	Depression; anxiety; crying episodes; sleep disorders; feelings of anguish, fear, and inferiority; lack of confidence; social isolation; being hostage to painful memories; exaggerated self-love; and affective and professional distrust.	Pride; selfishness; feelings of hurt, hatred, bitterness, and aversion; inability to forgive; fear of loneliness and betrayal; inflated ego; refusal to accept help; difficulty expressing feelings and crying; and a need to be in control of situations and appear strong.
Fifth <i>chakra</i>	Mouth (teeth, tongue, gums, cheek), salivary glands; jaw; facial mimic muscles; cervical vertebrae; neck muscles; larynx; trachea; vocal cords; thyroid; communication and swallowing. Gland: thyroid	Balance between reason and emotion; mental magnetism; creativity; decision-making ability; capacity to process emotions for transformation and release; and ability to establish and maintain healthy affective and professional interpersonal relationships.	Ease in expressing feelings; self-reflection; good discernment; awareness of one's relationships with oneself and others; balance among the subconscious, conscious, and superconscious processes; access to the individual and collective unconscious; faith; and interest in the search for truth.	Verbiage; spasms and pain in the throat; voice changes; neck ticks; sensation of a lump in the throat; frequent throat clearing; disturbances of the pharynx, larynx, trachea, and tonsils; neck pain; thyroid dysfunction; facial and neck dermatitis; sexual dysfunctions; asthma; bronchitis; chronic and acute colitis; irritable bowel syndrome; diarrheae; parathyroid disorders; hoarseness; and respiratory and gustatory impairments.	Thoughtless attitudes and mental habits; paranoid tendencies; shyness; excessive introversion and insecurity; agoraphobia; inability to express feelings; repressed emotions; negative intellect; rude language; and misuse of knowledge.	Excessive rationalism; difficulty reflecting on one's feelings; feelings of guilt and fear; inability to change direction in life; conflicts with self-image and with beliefs about the existence of God; confrontation with one's own altruistic convictions; and fear of cultivating self-faith.



Table 1. (continued)

<i>Chakras</i>	Dimensions and harmonious functioning of the <i>chakras</i>			Dimensions and imbalances in the functioning of the <i>chakras</i>		
	Physical	Mental	Spiritual	Physical	Mental	Spiritual
Sixth <i>chakra</i>	Hypothalamus; limbic system; vestibular system; cerebellum; visual system; auditory system; cranial nerve innervation; nasal structures; olfactory system. Gland: pituitary	Awareness of mental activity; resilience; neural, cognitive, and psychophysiological balance; clear and interpretive perception of life experiences; capacity to discriminate truth from illusion; creative thinking; innovation; and the ability to make complex decisions with wisdom and fairness.	Awareness of unconditional love; knowledge; wisdom; justice; altruistic and self-transcendent emotions; dignity; self-esteem; respect and reverence; ability to reflect on one's actions and experience regret.	Headaches; migraines; dizziness; auditory, visual, olfactory, and neurological disorders; impaired motor coordination and balance; ophthalmological disorders; brain diseases; dyslexia; cervical spine arthritis; and increased susceptibility to infectious diseases.	Impairment of the sleep-wake cycle; psychiatric disorders; anxiety; sadness; hyper-rationality; mental rigidity; intellectual arrogance; seeks to influence others through intellectual dominance and force of mind; may occasionally demonstrate indecision and irrationality; emotional indifference; and intellectual blockage.	Anger; wrath; disbelief and skepticism; latent or impaired intuition; lack of moral courage; exacerbated pride; rejection of spiritual knowledge or a higher intelligence; a changeable and unstable, and/or excessively intellectualized, cold, and calculating personality; seeks to dominate feelings and emotions through reason.
Seventh <i>chakra</i>	Cerebral cortex; skull; central sulcus; scalp. Gland: pineal	Awareness of the importance of positive attitudes and healthy mental habits; awareness of spiritual intelligence; transcendence; open-mindedness; empathy; and the ability to undergo the process of mental transmutation.	Balance of the Being in its multidimensionality; agape love; faith; altruism; hope; compassion; self-knowledge and self-transformation; insight; feelings of happiness and inner peace; and spiritual fulfillment.	Photophobia; heightened sensitivity to sound and environmental stimuli; headaches; insomnia; migraines; multiple sclerosis; ophthalmological disorders; and epilepsy.	Hallucinations; delusions; phobias; insanity; melancholy; depression; apathy; frustration; excessive intellectualization overriding spiritual intelligence; and misuse of knowledge.	Exacerbated materialism and pride; arrogance; skepticism; lack of discernment and openness toward spirituality; difficulty in self-giving; unethical use of religion and integrative practices for manipulation and deception; tendency toward hatred, self-destructive behavior, and revenge; and lack of purpose in life.

Note. This table was developed based on the bibliographic materials authored by Avalon (1953), Motoyama (1981), Chase (2018), as well as on the theoretical and practical frameworks of two meditation modalities: *Pranic Meditation* and *Meditation with Intentionality* (MI).

eliciting a systemic imbalance in the multidimensional body. This is a colossal mistake that results in the stagnation of the subtle and vital energy flow throughout the *nadis*, due to the accumulation of dense “energetic masses” within the *chakras* and at specific points along the *nadis*. These energetic patterns form clusters of “etheric dirt” that can be perceived by practitioners with clairvoyant abilities. It has been described as resembling a sticky, goop-like etheric substance that impairs the circulation of subtle and vital energy throughout the subtle body. These masses appear to consist of subtle energy in the form of thoughts, emotions, and feelings generated by the eager student who mistakenly overstimulates the *chakras* during meditative practice. The obstruction of vital energy circulation in the body has been discussed in the literature on the concept of “thought-forms,” which emphasizes that negative thought-forms can hinder energy flow by adhering to the *chakras* and other energy points (Claude, 2022). According to this view, negatively valenced or persistent thought patterns may contribute to disruptions in the flow of vital energy by becoming associated with specific energetic centers. Thought-forms are visible in the mental aura by an adapted vision (clairvoyant, mediumistic) (Claude, 2022). Therefore, following this line of reasoning, the hyperactivation of the *chakras* may lead to the “densification” of negative thoughts generated by the mental system of novice students who hold anxious expectations that meditation will resolve all their life problems.

Conversely, insufficient or absent stimulation of a *chakra* during practice may result in reduced vitality, thereby impairing the proper circulation of vital energy that sustains the functioning of other *chakras*. According to the principles of certain holistic practices, such as acupuncture, living beings are understood to possess an internal energy referred to as *Qi*. Within the framework of traditional Chinese medical philosophy, the balance of *Qi* is considered essential for optimal health, whereas illness and disease are understood to arise from imbalances or disruptions in its flow (Chon & Lee, 2013). Therefore, maintaining balance in the functioning of the *chakra* system, as well as ensuring the proper circulation of subtle energy, is regarded as crucial for preventing the emergence of clinical complications.

Taken together, these perspectives underscore the theoretical importance of maintaining balance in the functioning of the *chakra* system and in the circulation of subtle energy, particularly within the context of meditative practices, as a means of minimizing potential adverse experiences.

Adaptation of the Multidimensional Body (Physical, Mental, and Spiritual) of the Being to Meditation

This inducing factor is proposed here based on the principles of ancient Eastern traditions, as described in Western publications from the nineteenth to the twenty-first centuries. According to these principles, the human being is composed of multiple bodies or planes (Besant, 1897, 1917; Heindel, 1953; Ramacharaka, 1906, 1909), which function and interact with one another to maintain the animic condition of the Being. In brief, these bodies are commonly described as physical, etheric, emotional, mental, and spiritual. Together, they constitute what may be termed the “Multidimensionality of the Being”. For clarity, the five bodies are referred to in this study as dimensions. To facilitate understanding of their relationship with UNEARs and for didactic purposes, these dimensions are grouped into three categories: physical (corresponding to the biological body), mental (mind), and spiritual. Within this classification, the etheric and emotional bodies are subsumed under the spiritual dimension.

From a metaphysical perspective, the multidimensionality of the Being is composed primarily of physical (cells, organs, and systems), mental (a complex mental system), and spiritual (*chakra* system and *nadis*) dimensions, with the latter representing the essence of the Self within each individual. If we take into consideration that these dimensions interpenetrate and interact with one another, both health and disease may be associated with the balance or imbalance of the cellular activity, the mental system, and the *chakra* systems and *nadis*. In this context, the present study discusses how the harmonious or disharmonious functioning (i.e., hypo- or hyper-energized conditions) of the seven main *chakras* may be related to the emergence of UNEARs in meditation practitioners.

According to ancient yogic principles, *prana* is taken up during breathing by the *chakras* and subsequently redistributed throughout the body via the *nadis*, thereby contributing to cellular vitality (Ramacharaka, 1904). Should a *chakra* initially be in a hypoactive state (i.e., low energy), it passively receives a flow of subtle energy that tends to activate it, thereby supporting both its functional balance and the overall functioning of the *chakra* system. On the other hand, should one of the *chakras* be in a hyperactive state (i.e., excess energy), the absorbed subtle energy may accumulate within it, potentially leading to imbalances both in its functioning and in the other *chakras*. In both hypoactive and hyperactive states, the affected *chakras*

may exhibit a form of “parasitic” behavior by drawing subtle energy from other *chakras*. Consequently, the flow of subtle energy through the *chakra* system is impaired, resulting in its inadequate distribution throughout the body for cellular vitalization.

The emergence of UNEARs in both physical and mental dimensions may be related to the responsiveness of the physical body and its biological cells to subtle and vital energy mobilized during controlled breathing exercises. After being taken up during inhalation, the vital force (cosmic fluid) circulating through the subtle body must undergo a process of condensation. This process can be facilitated through the use of yogic breathing techniques and may occur during prolonged pauses between inhalation and exhalation (lasting approximately 3 to 6 seconds or longer), thereby promoting what can be termed “spiritual condensation” (Baraduc, 1913). In this way, the subtle energy may be converted into physical energy during controlled breathing exercises to ensure the nourishment of biological cells.

Since all meditation modalities involve breathing exercises, the uptake of subtle energy during breathing is an event that tends to increase the flow of this vital force throughout the body of novice practitioners. In some cases, the practitioner’s subtle body is not yet adapted to the sudden increase in the amount of subtle energy absorbed, and he or she may therefore manifest nuisance reactions in the physical and mental dimensions as a way of signaling that changes are occurring in the subtle body. In other words, the emergence of UNEARs may be a key indicator of a possible imbalance in the functioning of the elements that compose subtle human anatomy, namely the *chakras* and *nadis*.

The “Unearthing Effect” of Meditation

The “unearthing effect” of meditation is a phenomenon in which practitioners dig up their Self shaped by individual life experiences over time and become aware of the various facets of their personality shaped by thoughts continuously generated throughout life. This process appears to be closely linked to the primary aim of ancient meditative practices: self-knowledge and self-transformation.

It is well established that a novel classification system that categorizes specific styles of meditation into attentional, constructive, and deconstructive families was proposed in the literature (Dahl et al., 2015). However, irrespective of the modality, specific meditation practices may function as springboards, enabling practitioners to

jump into and dive deeply into the process of both deconstructing and reconstructing the Self. This process may be triggered even at the early stages of practice, for example, during controlled breathing exercises guided by will and thoughts endowed with intentions.

For some individuals, the remodeling of Self is conflictual and emotionally painful, as meditation works to dig up secrets hidden within the mind that are related to the fragility of the Self. This is an extremely difficult moment because practitioner “opens the drawers of the Ego” and comes across the imperfections having to face them head on. This is an example of a process of acceptance that can be challenging and may constitute one of the reasons for the high dropout rates observed in meditation studies. In fact, high dropout rates have been well documented (Delmonte, 1988; Fincham et al., 2023; Krisanaprakornkit et al., 2006; Nam & Toneatto, 2016). However, the reasons underlying students’ dropout from meditation practices remain fertile ground for further investigations.

The view that meditation consists merely of sitting, closing the eyes, breathing, and contemplating is simplistic and reductive. Meditative practice generally requires prior preparation of the mental system, allowing practitioners to regulate mental processes before engaging in self-knowledge and self-transformation. Firstly, it is essential that individuals comprehend the functioning and the roles of the elements involved in activities of the mental system, such as mental habits and attitudes, mental transmutation of thoughts, and cultivation of noble thoughts aimed at the common good for all.

Knowledge of human mental capacities has long been documented in ancient texts, which emphasize the importance of mental training for restoring and maintaining the harmonious functioning of mental processes (Atkinson, 1902, 1908, 1911, 1912). Such an approach may serve as a strategy to strengthen practitioners’ mental faculties and prepare them for more advanced stages of meditation. It is a valuable starting point to support the development of students’ critical thinking, as well as the intentional sowing and cultivation of seeds such as kindness, compassion, and love, which may contribute to the individual’s process of spiritual development. In this context, the remodeling of the Self may be initiated through the sowing and cultivation of the seeds of love. However, this process requires that practitioners demonstrate humility in accepting the need for change and have the courage to initiate it. Unfortunately, not all practitioners are prepared for this stage, and some may experience shock when they realize that the process of self-transformation depends on the extent to

which they are willing to confront their self, shaped by an individual’s life experiences over time

HYPOTHESIS

It has been hypothesized that the failures during the meditative practices, the adaptive response of the multidimensionality of the Being to meditation, and/or the “unearthing effect” of meditation are inducing factors that may be involved in the etiology of unexpected extemporaneous anomalous reactions (UNEARS).

METHODS

Participants and Ethics

The current study is derived from a larger original study conducted to evaluate the effects of meditation on 32 patients with chronic back pain, aged 24 to 80 years (mean age: 51 years). The original study was approved by the ethics committee of the Faculty of Medicine at the University of Brasília, Brazil, protocol CEP-FM 012/2011 (Fernandes, 2016). However, out of 32 participants, 3 reported in their meditation diaries the emergence of unexpected reactions, here referred to as UNEARS. All three participants were female, with ages ranging from 24 to 33 years (mean age: 29 years). A summary of their sociodemographic and clinical profiles is shown in Table 2.

Qualitative Data Collection Instrument

The detection and identification of UNEARS were based on qualitative data derived from semi-structured meditation diaries. After completing the practices, both in class and at home, participants were instructed to complete a paper-based diary in which they reported their daily meditation-related experiences in their own words.

To identify potential reactions, the practice logs included three open-ended questions:

- *What difficulties related to meditation practices have you experienced?*
- *What pleasant effects related to meditation practices have you experienced?*
- *What unpleasant effects related to meditation practices have you experienced?*

All reactions reported by participants were included in full in the Results section. During the five-week course, participants were also instructed to record the dates and times of their daily practice sessions. In addition, they documented the frequency with which they followed the instructor’s guidance.

Table 2. A Brief Sociodemographic and Clinical Profile of the Participants.

Participants	Age	Education	Occupation	Clinical condition	Medication for pain relief	Previous surgery	Previous experience with meditation or other complementary and alternative practices
ACO	24	Postgraduate	Physiotherapist	Chronic back pain, anxiety, attention difficulties, and allergy	Ibuprofen	No	Relaxation technique and Yoga: 4 years
ALGA	30	Postgraduate	Architect	Chronic back pain, anxiety, attention difficulties, allergy, headache and chronic migraine	Homeopathic, Neosaldine	No	No
GSL	33	Postgraduate	Physical education teacher	Chronic low back pain, and anxiety	Loxonin	No	Acupuncture

Meditation Training

The meditation modality used to develop the hypothesis of inducing factors in the present study is rooted in yogic principles, while incorporating distinct techniques. It is practiced in a static seated position and involves exercises of focusing attention to quiet the mind and attain serenity, and allow practitioners to master their ability to absorb, concentrate, balance, and project *prana*, and to use it toward the recovery and maintenance of their health (Castellar et al., 2014).

Participants in the study underwent a meditation training course consisting of two weekly sessions of 3 hours each. The sessions included an exposition of the theoretical foundations of the method, followed by collective meditation practice. In general, the duration of group meditation sessions ranged from 10 to 20 minutes.

The following topics were discussed during the 5-week training course: (1) What is meditation; (2) The healing power of meditation; (3) Pranic meditation; (4) *Prana and pranayama*; (5) The *chakra* system: anatomy and physiology; (6) The *chakra* system: pathology; (7) Mantra; (8) Obstacles and risks of meditation; (9) Pranic meditation: health and equilibrium; (10) Meditation and transcendence.

Intervention after Detection of UNEARs

After UNEARs were reported, participants were received by the meditation instructor, a professional with clinical practice experience. The instructor provided supportive guidance aimed at helping participants recall circumstances or events in their daily lives that may have generated conflicting thoughts and emotions associated with the emergence of these reactions. The instructor also assessed whether these reactions were recurrent. To determine whether the reactions were related to failures in the execution of meditation practices, the instructor conducted a review of the exercises with the participants.

Based on practitioners' self-reported experiences and the information obtained during the welcoming care, an etiological hypothesis was proposed, supported by the following potential inducing factors underlying a possible cause-and-effect relationship between meditation and UNEARs: (1) failures during the performance of meditative practices, (2) adaptation of the multidimensional body to meditation, and (3) "unearthing effect" of meditation.

RESULTS

The meditation diaries enabled novice practitioners to describe UNEARs occurring during or after meditation practice. Analysis of the diary data showed that three participants exhibited such reactions during the course period: ACO (weeks from 1 to 3); ALGA (weeks from 2 to 4), and GSL (weeks 1, 3, and 4) (see Table 3).

A primary characteristic of UNEARs is their capacity to manifest across all dimensions of the multidimensional body. Data collected in this study indicate that practitioners experienced effects in all three dimensions (see Table 4). After identifying the manifestations of UNEARs, the instructor engaged with the students to mitigate or eliminate the nuisance reactions. Accordingly, two initial strategies were proposed:

First, the instructor collected information regarding circumstances or events that may have occurred in the participant's life prior to joining the meditation course. The aim was to determine whether meditation had acted as a "trigger" for the emergence of UNEARs. In this context, participants provided additional information about concerns related to interpersonal relationships within the family environment, at work, or with friends. They also reported whether their symptoms were new or recurrent. Second, to assess potential errors during meditative practice, the instructor asked participants to repeat the exercises while explaining each step.

Based on the reports of the three practitioners, the instructor proposed specific interventions for each

Table 3. Reports of UNEAR Emergence and Symptom Descriptions Provided by Study Participants.

Participants	Week 1	Week 2	Week 3	Week 4	Week 5	Number of days and minutes practiced during the meditation course
ACO	After meditation: UNEARS: weight on the shoulders; tiredness, and drowsiness. Frequency of practices: 5 times per week Total weekly practice time: 55 min Average daily duration of meditation practices: 11 min	Did not report whether the UNEARS occurred during or after meditation. UNEARS: increase in anxiety and aggressiveness. Frequency of practices: 6 times per week Total weekly practice time: 100 min Average daily duration of meditation practices: 17 min	During the meditation: UNEARS: imbued with feelings of anger and jealousy; and feeling indisposed. Frequency of practices: 6 times per week Total weekly practice time: 105 min Average daily duration of meditation practices: 17 min	No UNEARS. Frequency of practices: 7 times per week Total weekly practice time: 133 min Average daily duration of meditation practices: 19 min	Missing data. (*)	Number of days: 24 Total meditation practice time: 368 min Average daily meditation practice duration: 15 min
ALGA	No UNEARS. Frequency of practices: 2 times per week Total weekly practice time: 20 min Average daily duration of meditative practices: 10 min	Did not report whether the UNEARS occurred during or after meditation. UNEARS: increased headache in the forehead area; sudden heat sensations in different areas of the body; fear of consciousness leaving the body; fear of the unknown; anguish; negative feelings; numbness in the feet. Frequency of practices: 6 times per week Total weekly practice time: 131 min Average daily duration of meditative practices: 22 min	Did not report whether the UNEARS occurred during or after meditation. UNEARS: headache in the forehead area; increased salivary secretion; and numbness in the legs and feet. Frequency of practices: 6 times per week Total weekly practice time: 101 min Average daily duration of meditative practices: 17 min	After meditation: UNEARS: slight headache in the forehead area; accumulation and concentration of subtle energy in the forehead area; and numbness in the legs and feet. Frequency of practices: 5 times per week Total weekly practice time: 128 min Average daily duration of meditative practices: 26 min	After meditation: UNEARS: slight headache in the forehead area. Frequency of practices: 2 times per week Total weekly practice time: 48 min Average daily duration of meditative practices: 24 min	Number of days: 21 Total meditation practice time: 358 min Average daily meditation practice duration: 17 min
GSL	Did not report whether the UNEARS occurred during or after meditation. UNEARS: headache Frequency of practices: 4 times per week Total weekly practice time: 76 min Average daily duration of meditative practices: 19 min	Did not report whether the UNEARS occurred during or after meditation. UNEARS: sudden heat sensations in the body; dizziness and feeling faint. Frequency of practices: 6 times per week Total weekly practice time: 105 min Average daily duration of meditation practices: 18 min Note: prior to the meditation class, she underwent infrared and ultrasound physiotherapy.	After meditation: UNEARS: Physical and mental exhaustion. Frequency of practices: 7 times per week Total weekly practice time: 137 min Average daily duration of meditative practices: 20 min	After meditation: UNEARS: crying episodes, a desire to discontinue meditation practice. Frequency of practices: 7 times per week Total weekly practice time: 131 min Average daily duration of meditative practices: 21 min Note: she managed to deal with the interpersonal conflict at work by means of breathing and visualization techniques aimed at quieting the mind.	No UNEARS. Frequency of practices: 4 times per week Total weekly practice time: 84 min Average daily duration of meditative practices: 21 min	Number of days: 28 Total meditation practice time: 533 min Average daily meditation practice duration: 19 min

Note. *Although data were missing in the 5th week, the results showed pain cessation in the 4th week.

Table 4. Dimensions in which the UNEARs were manifested, Etiological Hypotheses, Interventions, and Outcomes.

Participants	UNEARs-affected dimensions			Interventions	Outcomes
	Physical	Mental	Spiritual		
ACO	Shoulder heaviness, tiredness, drowsiness, and feeling indisposed <i>Etiological hypothesis:</i> adaptation of the multidimensional body to meditation.	Increased anxiety <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 6th and 7th <i>chakras</i> ; reduced circulation of subtle and vital energy through the seven main <i>chakras</i> ; and/or “unearting effect” of meditation (initial stage of the process of remodeling the Self)	Anger, jealousy, and increased aggressiveness <i>Etiological hypothesis:</i> “unearting effect” of meditation (initial stage of the process of remodeling the Self).	Performing exercises with controlled breathing endowed with intention to release the flow of subtle and vital energy from the 6th and 7th <i>chakras</i> to be redistributed to the other <i>chakras</i> ; exercises aimed at promoting the circulation of subtle and vital energy throughout the seven main <i>chakra</i> system. Aim: to reduce energy accumulation in the 6th and 7th <i>chakras</i> , rebalance the flow of energy throughout the seven main <i>chakra</i> system, and undog the flow of energy throughout the <i>nadis</i> system.	UNEARs ceased in week 4.
ALGA	<u>Headache</u> <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 6th <i>chakra</i> ; reduced circulation of subtle and vital energy throughout the seven main <i>chakra</i> system; and/or adaptation of the multidimensional body to meditation. Sudden heat in the body <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 5th <i>chakra</i> ; extemporaneous awakening of <i>kundalini</i> energy. Sudden sialorrhea <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 5th <i>chakra</i> ; and/or adaptation of the multidimensional body to meditation. Numbness in the legs and left foot <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 1st and 2nd <i>chakras</i> . Note: The sitting bodily posture on the chair may have influenced this reaction; however, the participant did not adopt the lotus posture with crossed legs.	Non-specific negative feelings <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 7th <i>chakra</i> and hypoactivation of the 6th <i>chakra</i> ; and/or “unearting effect” of meditation (initial stage of the process of remodeling the Self).	<u>Fear of consciousness leaving the body</u> <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hypoactivation of the 7th <i>chakra</i> ; and/or “unearting effect” of meditation (initial stage of the process of remodeling the Self). Anguish <i>Etiological hypothesis:</i> “unearting effect” of meditation (initial stage of the process of remodeling the Self). Sensation of subtle-energy accumulation and concentration in the forehead area <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 6th <i>chakra</i> .	Performing exercises with controlled breathing endowed with intention to capture subtle and vital energy to activate the 1st, 2nd, and 7th <i>chakras</i> . Performing exercises with controlled breathing endowed with intention to release the flow of subtle and vital energy from the 6th <i>chakra</i> to be redistributed to the other <i>chakras</i> ; exercises aimed at promoting the circulation of subtle and vital energy throughout the seven main <i>chakra</i> system. Aim: to rebalance the flow of energy throughout the seven main <i>chakra</i> system and unclog the flow of energy throughout the <i>nadis</i> system.	Reduction of headache and cessation of other UNEARs.
GSL	<u>Headache</u> <i>Etiological hypothesis:</i> failures in the execution of the exercises causing hyperactivation of the 6th <i>chakra</i> ; reduced circulation of subtle and vital energy throughout the seven main <i>chakra</i> system; and/or adaptation of the multidimensional body to meditation. Physical exhaustion, dizziness, and feeling faint <i>Etiological hypothesis:</i> adaptation of the multidimensional body to meditation, mainly to the controlled breathing exercises. Note: before the meditation class, the participant underwent physiotherapy with infrared and ultrasound. These three symptoms occurred immediately after practicing meditation; however, they may have been caused by the treatment or simply triggered by the meditation.	Mental exhaustion <i>Etiological hypothesis:</i> failures in the execution of the exercises due to lack of circulation of subtle and vital energy throughout the seven main <i>chakra</i> system; and/or adaptation of the multidimensional body to meditation, mainly to the controlled breathing exercises.	<u>Crying episodes, desire to discontinue meditation practices, and recollections of interpersonal problems brought to mind</u> <i>Etiological hypothesis:</i> “unearting effect” of meditation (initial stage of the process of remodeling the Self).	Performing exercises with controlled breathing endowed with intention to release the flow of subtle and vital energy from the 6th <i>chakra</i> to be redistributed to the other <i>chakras</i> ; exercises aimed at promoting the circulation of subtle and vital energy throughout the seven main <i>chakra</i> system. Aim: to rebalance the flow of energy throughout the seven main <i>chakra</i> system and unclog the flow of energy throughout the <i>nadis</i> system.	UNEARs ceased in week 5.



student. In all three cases, the UNEARs ceased during the meditation course. However, among the UNEARs reported by ALGA, headache was the only symptom that did not completely resolve, showing only partial reduction.

Interestingly, some reactions appeared to be unrelated to errors in exercise execution. Although ACO performed the exercises correctly, she reported UNEARs, including shoulder heaviness, tiredness, drowsiness, and feeling indisposed (see Table 4).

In addition to the UNEARs reported by the three participants in the current study, further reactions were reported by students who attended meditation courses conducted between 2007 and 2013, 2018 and 2019, and from 2024 to the first half of 2026. Examples of UNEARs experienced by novice practitioners include lacrimation, sudden sialorrhea, headaches, sudden heat in the hands, face, and along the spine, itching and tingling sensations throughout the body, as well as irritation, fear, anxiety, depression, and panic (unpublished data). In some cases, these reactions ceased spontaneously; in others, they ceased following intervention by the meditation instructor, who identified the issue during the welcoming care for students.

Conversely, reports of pleasant reactions were also observed, including improvements in attention, concentration, and breathing capacity; reduced pain; altered states of consciousness accompanied by a sense of peace; and the development of altruism (unpublished data).

DISCUSSION

The present study brings up reports of UNEARs manifested across the physical, mental, and spiritual dimensions of novice practitioners who were still engaged in the learning stage of basic exercises. In other words, participants had no detailed prior knowledge of the theoretical framework of the meditation modality used in the present study, nor of the exercises that comprise the meditative practice. Even so, they experienced unexpected reactions during the meditation course.

The meditation described in this study consists of controlled breathing exercises that promote slow abdominothoracic movements and require nasal breathing only. The lungs are less engaged, as the task of inhaling and exhaling is shared with the abdominal region. In general, most novice practitioners are not familiar with this type of breathing, which is characterized by a brief pause between inhalation and exhalation. As a result, many students make errors during practice by inhaling or exhaling too quickly or by failing to observe these pauses. Consequently, it is

common for practitioners to experience adverse reactions during or after the practice.

The capture of subtle energy often occurs during breathing exercises. After inhalation, air imbued with this “energy” is thought to spread throughout the body, permeating cells and organs. In addition, breathing exercises may also activate *chakras*, promoting the unblocking of subtle vital energy flow through the *chakra* system and *nadis*. One consequence of this process is the emergence of itching sensations in the body, as reported by novice practitioners in the meditation courses mentioned earlier in the present study.

Headaches, sialorrhea, lacrimation, heat sensation, and numbness in the legs constitute a group of UNEARs corresponding to the physical dimension of these symptoms. With regard to headaches, this type of UNEAR appears to be a common effect among meditation practitioners. Such reactions have been well documented in the literature, being described as unwanted effects (Cebolla et al., 2017) and adverse events (Farias et al., 2020), suggesting a possible association with the harmful effects of meditation. Reports of frontal headaches and lacrimation are common among novice practitioners, as also observed in the present study. This area of the head corresponds to the region in which the sixth *chakra* is situated within the subtle domain (spiritual), while also being related to the physical body (Greenwood, 2006). With the exception of *chakras* 1 and 7, the sixth *chakra* and the others that compose the seven main *chakra* system have anterior and posterior projections relative to the body (Shang, 2000). This may explain why practitioners sometimes report headaches radiating from the frontal region of the forehead toward the back of the neck.

Failures in performing the exercises and the adaptation of the multidimensionality of Being to meditation are among the possible explanations for the emergence of headaches and lacrimation linked to the sixth *chakra*. Such symptoms may occur due to hyperactivation of this energy center caused by errors performed by inexperienced practitioners. Overall, this may lead to an accumulation of subtle energy within the *chakra*, resulting in a blockage of energetic flow throughout the *chakra* system and *nadis*. The increase in concentration of subtle energy in a particular *chakra* may produce unexpected effects. It has been suggested that the upward movement of *chi* to the head may cause irritation and, in some cases, headaches, and that concentration on the heart *chakra* (fourth *chakra*) may lead to congestion and pain in the chest and cardiac region (Chia, 1983). On the other hand, if this *chakra* is initially in

a hypoactivated state, the uptake of subtle energy during breathing exercises could bring it to a new state of balance and vitality to which the subtle body was not previously habituated—something resembling hormesis, an adaptive response of cells and organisms to moderate (usually intermittent) stress (Mattson, 2008), which, in this context, may be stimulated by meditation. Therefore, UNEARs may arise as part of the natural adaptive process of the multidimensional body to meditation, depending on the initial vitality state of the *chakra* prior to practice.

The manifestation of sialorrhea reported in the present study is a common reaction that may be related to the fifth *chakra*, which, according to Best (2010), is located in the throat region. In the case of sialorrhea, this condition may occur as an adaptive response stimulated by the unblocking of points along the *nadis*, which under normal conditions vitalize the fifth *chakra* through the continuous flow of subtle energy. However, sialorrhea may also be related to errors in the execution of meditative practice, for example, in cases in which this *chakra* has been hyperactivated due to excessive accumulation of subtle energy directed toward it.

It is common for students beginning meditation courses to present with physical and/or mental problems. In many cases, meditation has been reported as a supportive intervention for alleviating clinical conditions such as depression (Loiselle et al., 2023; Mahendru et al., 2021), anxiety (Blum et al., 2021), and pain (Fan et al., 2024). These benefits may be related to the “cleansing” and unblocking of *chakras* and *nadis* promoted by breathing techniques. Within the Chinese tradition, this cleansing process is understood to occur when vital energy (*chi*) begins to circulate more freely through the body. However, this process may also produce temporary nuisance reactions, including belching or diarrhea (Chia, 1983). From this perspective, the multidimensional body—initially considered “sick” or energetically imbalanced—undergoes an adaptive process to accommodate the continuous flow of subtle energy responsible for bodily revitalization. In this context, UNEARs may be expressed through the physical body as signals informing consciousness about recent alterations occurring within the subtle dimensions of the individual’s Being. The purpose of these manifestations is understood as signaling that the functioning of the *chakras* and *nadis*—elements of the subtle body, which belong to the spiritual dimension—is returning to normal conditions.

In addition to occurring during meditation practices, unexpected reactions related to holistic interventions have also been observed in individuals undergoing yoga (Cramer

et al., 2019), acupuncture (Bäumler et al., 2021), and hypnosis (Gruzelier, 2000; Stanley & Burrows, 2001). In line with these considerations, it is conceivable that some of these reactions could be symptoms related to the adaptive response of the multidimensional body to such interventions. Nevertheless, the possibility that nuisance reactions may arise due to negligence, inappropriate therapeutic approaches, or insufficient practitioner experience should not be disregarded.

Heat sensations in the body were among the most frequently reported UNEARs by novice practitioners in the present study. Such sensations have previously been described as extraordinary experiences (Vieten et al., 2018). According to participants’ reports, practitioners experienced sudden episodes of heat throughout the body during meditation. Interestingly, some reports described the sensation as originating in the perineal region (associated with the first *chakra*) and ascending along the spine toward the top of the head, subsequently spreading throughout the face. One possible explanatory framework for this phenomenon is the so-called “*kundalini* awakening”.

The term *kundalini* refers to a concept found in yogic and tantric traditions, often described as an all-encompassing form of consciousness or energy inherent in human beings. According to this framework, *kundalini* may manifest in two forms: an outer form, which is the force that gives rise to the universe and governs all our physiological processes, and an inner form, which is the enlivening force behind spiritual awareness (Woollacott et al., 2021). In traditional interpretations, *kundalini*—a cosmic energy—(Chia, 1983) has also been described as playing a role in the activation of *chakras* (Motoyama, 1981). It creates extra heat in the body when awakened by the practice of *pranayama* (breathing exercise) (Saraswati, 2020). Some practitioners report sudden sensations of heat in specific body regions, particularly in the face and the palms of the hands. These experiences appear to be relatively common during or immediately after meditation practices. Such sensations of heat have been interpreted as potentially related to healing abilities involving the intentional transmission of energy through the hands or at a distance. In fact, sensations of heat in the hands were reported among practitioners of distant healing practices (Dossey, 1994).

Despite the benefits attributed to meditative practices for mental health, the development of anxiety has been identified as a potential example of UNEAR and has been described as an adverse effect (AE) in meditation-related studies (Taylor et al., 2022). The desire to rapidly attain the benefits associated with meditation may also contribute

to the emergence of anxiety, nervousness, and aggressiveness. Such reactions were reported by participants in previous meditation courses, whose testimonies informed the present discussion. In addition, anxiety may emerge among practitioners participating in group meditation settings. In these contexts, anxiety may occur among individuals who have not yet experienced pleasant UNEARs but are exposed to reports of beneficial experiences from their fellow practitioners. When novice practitioners fail to perceive pleasant UNEAR experiences during the initial weeks of meditation, they may begin to perceive themselves as abnormal or different from other participants. Consequently, feelings of frustration and depressive symptoms may emerge. Under such circumstances, practitioners may cultivate a desire to discontinue meditation practice. This phenomenon may become a persistent barrier to continued engagement, and overcoming it depends largely on the practitioner's ability to understand the process of uncovering the true Self and to develop adaptive strategies for coping with these experiences.

In the current study, the etiological hypothesis for the emergence of anxiety may be related to the improper performance of exercises that lead to hyperactivation of the sixth *chakra*. Such hyperactivation appears to be a common error among practitioners without prior meditation experience. In general, this occurs when practitioners become excessively focused on rapidly perceiving the flow of subtle energy through the *chakra* system and throughout the body. When these expectations are not fulfilled, practitioners may develop anxiety resulting from self-generated expectations combined with the desire to achieve the benefits of meditation practice more quickly.

Besides errors in performing the exercises and the adaptation process of the multidimensional body, the "unearthing effect" of meditation may represent another factor associated with the emergence of UNEARs. In the present study, novice practitioners reported reactions including non-specific negative feelings, anguish, crying episodes, a desire to discontinue meditation practice, recollections of interpersonal conflicts, fear of consciousness leaving the body, and fear of the unknown. One possible explanation is that meditation may promote the opening of what could be described as the "closed doors of the Self." This process may occur when the seventh *chakra*, supposedly connected to the spiritual dimension, becomes activated during meditative practice. Such activation may lead to self-sabotaging behavior manifested by some practitioners. In general, this effect has been observed among novice practitioners who tend to avoid exposing their secrets, personal flaws, and

weaknesses. Instead, practitioners choose to bury these aspects in the recesses of the mind. This functions as a defense mechanism to prevent practitioners from directly confronting the Self. From a metaphysical perspective, the Self is shaped by individuals' life experiences over time and may be expressed through personality and character.

Self-sabotaging behavior is an example of the "unearthing effect" of meditation, commonly experienced by novice practitioners. It may also be conceptualized as a form of UNEAR that manifests as a symptom within the spiritual dimension. This reaction has been observed in some novice practitioners and may contribute to the individual's desire to discontinue meditation practice. In the present study, ACO reported feelings of anger, whereas GSL experienced crying episodes and a desire to withdraw from the meditation course. Self-sabotaging behavior may also lead practitioners to develop aversion toward meditation. Such reactions may be triggered in the following ways: when practitioners have difficulty recognizing and accepting the perceived Self as revealed through meditation, or when they construct various psychological barriers that prevent meditation from helping them cope with their physical, mental, and spiritual challenges. In this latter case, self-sabotage may occur among individuals who use meditation as a means of attracting attention from relatives and friends, demonstrating that they are attempting to "overcome" their "illnesses". However, they may not genuinely seek to resolve these disturbances, instead using them as a strategy of victimization to elicit attention from others.

The development of aversion to meditation may also occur when students begin to attribute to meditation the loss of something they consider valuable. In an investigation of the effects of meditation on chronic back pain, there were cases in which practitioners experienced a reduction or even complete elimination of pain following practice (Fernandes, 2016). Interestingly, despite this notable benefit, some practitioners reported that meditation removed their pain—a condition they had come to regard as a constant and inseparable companion—without providing any perceived compensatory gain for this loss.

The fact that meditation promotes the remodeling of the Self suggests that the "unearthing effect" may be directly linked to the practitioner's spiritual dimension. However, UNEAR may also manifest in the mental dimension, as the processes of self-knowledge and self-transformation are often accompanied by internal conflicts. In most cases, such conflicts arise from the difficulties practitioners experience in accepting the changes elicited by meditation.

CONSIDERATIONS REGARDING THE STUDY LIMITATIONS

Although the present study proposes an etiological hypothesis supported by putative inducing factors suggesting a possible cause-and-effect relationship between meditation practices and UNEARs, certain limitations must be acknowledged.

In the last years, the existence of *chakras* within the human body has been explored in a limited number of studies, including investigations addressing the proposed interconnections between *chakras* and the nervous system (Malimas et al., 2023), anatomical approaches attempting to identify putative correlates of *chakras* through cadaveric dissection (Sweta et al., 2017), and theoretical model describing their development during embryogenesis (Acharya et al., 2018). Nevertheless, empirical validation of *chakras* and *nadis* remains constrained by the absence of technological instruments capable of detecting, visualizing, or quantifying their activities. Consequently, current conceptualizations regarding the role of *chakras* in health, disease processes, and human spiritual development remain largely speculative and situated within metaphysical frameworks.

The potential relationship between *chakras* and meridian systems in the context of health and disease has been addressed in the scientific literature (Shang, 2000, 2001). However, these interpretations remain theoretical and lack confirmation through studies conducted with methodological rigor. Similarly, the inducing factors hypothesis proposed in the present study, as well as its possible association with UNEARs, should be interpreted with caution. Therefore, these constructs should be considered as preliminary scientific interpretations that warrant thorough investigation and empirical validation in order to enable, in the future, the establishment of causal relationships between *chakra*-related mechanisms and physiological outcomes in both the physical and mental domains.

In this study, the hypothesis concerning inducing factors is partially associated with the positive outcomes of the intervention strategies conducted by an instructor with substantial knowledge of the *chakra* system. Nevertheless, it remains unclear whether these strategies would demonstrate similar effectiveness among practitioners of other meditation modalities that do not incorporate exercises focused on *chakra* activation and/or the intentional direction of subtle and vital energy (*prana*) throughout the body. Despite these limitations, controlled breathing exercises, which are common to most meditation practices, may naturally facilitate the absorption and circulation of subtle and

vital energy through the *chakras*, thereby activating these energetic centers in a constitutive manner. Such activation may contribute to a broad spectrum of physiological, psychological, and spiritual reactions related to the adaptation of the multidimensionality of the Being to meditation.

Empirical observations obtained from students enrolled in previous courses of the present meditation modality suggest that balanced *chakra* activation may be facilitated through controlled breathing exercises combined with thoughts endowed with positive intentions. These practices have been reported as effective in reducing, or even eliminating, unpleasant-type UNEARs. Another intervention strategy involves a mental approach aimed at encouraging students to understand that some of these reactions are part of the process of accepting the imperfections of the Self. This interpretation is consistent with the statement made by Chaturvedi et al. (2015), who claimed that *“the positive flow of thoughts is based on an accurate understanding of the self and so it acts as a key to unlock the treasure trove of peaceful experiences which are lying within oneself.”*

Based on unexpected reactions reported by novice practitioners, this qualitative study proposes the existence of inducing factors acting as “triggers” of UNEARs. Although the present article primarily provides a reasoned argument supported by case-report evidence, future studies involving larger sample sizes, standardized questionnaires, and appropriate analytical approaches may enable more rigorous testing and further consolidation of the hypothesis proposed herein.

CONCLUSION

This study took into account a small sample comprising three practitioners with a history of clinical complications. Considering both the empirical observations derived from participants in previous meditation courses and the broad range of unusual meditation-related experiences described in the scientific literature, an important question arises: why did the remaining 29 practitioners with chronic back pain and symptoms of depression and anxiety not manifest UNEARs during or after meditation practice? Notably, these participants were undergoing conventional pharmacological treatment for depression and anxiety while also using anti-inflammatory medications.

In the current study, the three students were the only participants who reported UNEARs, and it was possible to identify that each of them made procedural mistakes during the meditation practices. However, reactions were also observed in the absence of errors during the execution of

the meditative exercises: ACO experienced UNEARs in the physical and spiritual dimensions, whereas GSL reported UNEARs manifested in the spiritual dimension. In light of these findings, how can an appropriate etiological hypothesis be established for each case? Furthermore, how can an intervention be proposed that is capable of reducing or eliminating such unexpected experiences?

Empirical observations suggest that UNEARs constitute an unpredictable phenomenon. They may manifest in novice practitioners as well as in individuals with prior meditation experience; they may occur within only a few minutes of practice; and they may affect students across different ages, genders, colors, social statuses, and cultural backgrounds. Additionally, UNEARs may be reported both by practitioners with religious beliefs and by those with atheistic or skeptical worldviews, and they appear to arise independently of prior clinical history or medical conditions. Furthermore, evidence from previous studies on meditation-related experiences indicates that a range of reactions potentially related to meditation may occur regardless of the meditation modality employed.

In this context, it is reasonable to propose that the systematic study of UNEARs and their etiological hypotheses may be better understood if these reactions are initially categorized according to the affected dimension of the practitioner (i.e., physical, mental, and spiritual). To this end, the following procedures are recommended: (1) the reaction should be carefully observed and described in detail; (2) the affected dimension in which the reaction manifests should be identified; and (3) relevant information regarding the student's clinical history and personal life experiences should be collected. Subsequently, a specific intervention should be proposed based on the analyzed data. These procedures should be conducted by an experienced meditation instructor with competencies that facilitate a supportive and structured interface during the welcoming care.

The active involvement of an instructor during the welcoming process is essential. The presence of an experienced meditation instructor capable of supporting practitioners and assisting them with any doubts or difficulties that may arise during the practices is highly relevant. It is possible that some of the adverse events and reactions reported in the literature occurred because practitioners were not adequately supported during meditation sessions, resulting in uncorrected errors during the exercises and insufficient guidance in dealing with aspects of the Self that emerged throughout the practice.

One issue that deserves particular attention concerns the possible association between UNEARs and the dropout of novice practitioners from meditation programs. Many individuals seek meditation as an alternative means of resolving a wide range of problems, including health-related, emotional, and financial difficulties. However, such individuals often do not fully understand the fundamental principles underlying meditation practice and may develop unrealistic expectations regarding the rapid attainment of its benefits. Consequently, when they realize that their problems persist despite engaging in meditation, feelings of frustration, anxiety, nervousness, and other adverse emotional reactions may emerge. In this context, novice practitioners may gradually develop the desire to discontinue meditation practice.

Unfortunately, meditation has long been portrayed as a "miracle pill" capable of curing diseases and solving all life's problems. Such a perspective represents a serious misconception that may undermine the credibility of an ancient tool whose primary purpose lies in the cultivation of self-knowledge and self-transformation.

To prevent the emergence of UNEARs, meditation courses should incorporate both theoretical and practical frameworks addressing the benefits as well as the potential risks associated with meditation practice. Structured educational content should be developed, including detailed descriptions of the exercises and appropriate warnings regarding possible unexpected reactions related to meditation. Such materials should also provide descriptions of techniques capable of reducing or alleviating the most common UNEARs reported by practitioners.

Meditation instructors should develop "Meditation Information Leaflets" (MILs) for novice practitioners; however, careful consideration should be given to how such information is conveyed. Prior disclosure of unusual meditation-related experiences may inadvertently elicit UNEARs through self-induction or expectancy-related mechanisms, possibly linked to the nocebo effect.

Another strategy that may help prevent UNEARs across different meditation modalities concerns the pedagogical approach adopted in meditation classes. Both the theoretical and practical frameworks should be well-grounded, clearly explained, and designed to maximize students' understanding of meditation principles and techniques. Furthermore, the topics addressed during theoretical instruction should preferably be related to the meditation practices performed on the same day of the class.

Still, regarding the prevention of UNEARs and the improvement of meditative practices, it is recommended that novice practitioners initially undergo prior mental preparation through basic breathing exercises guided by intentional thoughts and volitional control aimed at promoting the harmonious functioning of mental activities. Additionally, during the first weeks of practice, novice practitioners should avoid highly complex exercises, particularly those involving the deconstruction and reconstruction of the Self or practices capable of inducing meditative states characterized by altered states of consciousness. With respect to nighttime meditation, practices should be limited to basic breathing exercises intended to calm the mind, relax the body, and promote inner peace. In this context, meditation training is recommended to follow standardized learning stages, including: (I) breathing exercises designed to adapt the body to new breathing patterns; (II) attention and concentration exercises aimed at training and disciplining the mind; and (III) breathing practices associated with thoughts endowed with specific intentionality directed toward achieving mental balance.

The inclusion of practitioners in more advanced lessons and meditation practices should occur gradually, always taking into consideration the time required for each individual to develop mental balance and to understand the deeper meaning and purpose of meditation practice.

Authors have used principles from neuroscience and psychology to explain the broad range of unusual reactions reported by meditators. Nevertheless, the underlying problem may extend beyond the conventional approaches commonly employed to assess clinical conditions and biological variables. The investigation of the potential causes of meditation-related symptoms may benefit from approaches grounded in the understanding of the subtle anatomy of the Being, as well as from examining the difficulties practitioners experience when confronting their Self.

A wide variety of terms have been identified in previous studies to describe the unusual meditation-related experiences referred to here as UNEARs. This phenomenon should not be interpreted or judged as a devastating avalanche attributable solely to meditation.

IMPLICATIONS AND APPLICATIONS

The present study proposes the conception of UNEARs as a phenomenon that may occur both in novice practitioners and in experienced meditators. The inducing factors described herein may contribute to future investigations aimed at understanding why such reactions do not

manifest in all meditation practitioners. Additionally, the emergence of UNEARs reported in other alternative practices, such as yoga, acupuncture, and hypnosis, reinforces the relevance of achieving a deeper understanding of the subtle anatomy of the Being and its relationship with the health–disease binomial. The “unearthing effect” of meditation provides clues about the *modus operandi* of the mind and opens new doors for future investigations examining how meditation influences the mental system and contributes to processes of self-remodeling and the redesigning of personality and character in individuals.

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