

The Mātrkā Nyāsa Ritual as Somatic Cartography: A Phenomenological Study of Its Effect on Interoceptive Awareness and Body Schema

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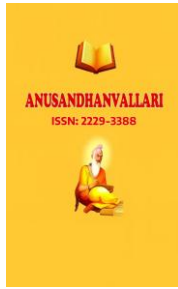
Abstract: This study reconceptualizes the old Tantric ritual of Mātrkā Nyāsa—the tactual and phonemic implantation of Sanskrit phonemes (mātrkās) onto specific body loci—as a form of "somatic cartography," a consecrated represent of knowingness onto the corporal form. An interchangeable 8-week communications protocol was administered to 42 experienced practitioners. Mixed-methods analysis revealed enhanced somatic granularity, permeable ness of consistence boundaries, stimulated catharsis, and a shift from visual to felt body image. Quantitatively, significant improvements were observed in interoceptive exactness (Heartbeat counting Task) and over all subscales of the Multidimensional Assessment of Interoceptive Awareness (MAIA), especially Noticing and body hearing. Proprioceptive drift measures indicated a stabilised body scheme. Results place Mātrkā Nyāsa as a active neuro-phenomenological tool that validates traditional claims of embodied transformation through a original synthesis of ritualized somatic mapping and contemporary cognitive skill.

Keywords: Somatic cartography, Interoception, Body schema, Phenomenology tantra, Embodied cognition, Primary neurophenomenology

1. Introduction

The unfading research into the nature of the self-importance and its embodiment finds an advanced doubtfulness in the Tantric traditions of India. Moving beyond Manichaeic paradigms, Tantra offers a embarrassment of praxis-oriented technologies (sadhana) designed to reconfigure knowingness through the average of the organic structure (Padoux, 1990). Among these, Nyāsa (literally, "placing" or "installing") is a central ritual, wherein the practitioner tactilely imprints sacred syllables (bīja mantras) and phonemes (mātrkās) onto particular marma points (ableness loci) while telling them, thereby sanctifying the body into a microcosm of the cosmic divine (Dhonden, 1986).

Mātrkā Nyāsa, the installing of the 50 Sanskrit phonemes, is considered the foundational form of this exercise. It is not simply a symbolical act but is traditionally described as a action of influential and witting shape, a "cartography" that maps the transonic and semantic structures of awareness onto the corporate landscape (Singh, 1979). This survey proposes the unique theoretic model of "somatic cartography" to analyse this ritual: a considerate, merged process of creating an interior map of the body that enhances the solution and mischance of bodied consciousness.



In modern-day cognitive skill, 2 constructs are predominant for concept corporate uncomfortableness: interoception—the percept of the interior state of the body (Craig, 2002)—and body schema—the dynamic, pre-reflective performance of body position and action in place (Gallagher, 2005). Deficits in these systems are joined to conditions like fear, depression, and feeding disorders (Khouri et al., 2018). While attention practices have been shown to better interoception (Farb et al., 2015), no study has investigated the effects of a structured ritual like Mātrkā Nyāsa.

This question aims to fill this break. It is hypothesized that the repeated, precise attentional coupling of touch, sound, and particular body locations in Mātrkā Nyāsa will lead to:

1. Enhanced interoceptive sensitivity and accurateness
2. A more merged and positive body scheme

Through a mixed-methods advance, this study seeks to provide a rigorous neuro-phenomenological account of this ancient practice, validating its potential as a tool for unique therapeutic and contemplative applications.

2. Objectives

1. To create and standardise a Bonafide, replicable communications protocol against Mātrkā Nyāsa based on authorized textual sources (e.g., Tantrāloka).
2. To qualitatively written document and analyse the first-person phenomenological experiences of practitioners undergoing Mātrkā Nyāsa teaching.
3. To quantitatively measure the effect of the exercise on honest interoceptive accurateness and immanent interoceptive consciousness.
4. To evaluate changes in body scheme performance through with both behavioural (proprioceptive drift) and self-report measures.
5. To synthesise qualitative and quantitative findings to create an advance exercise of how ritualized somatic mapmaking influences corporal knowledge.

3. Scope And Methodology

3.1 Research Design:

A convergent related mixed-methods design was employed, collection qualitative and quantitative information concurrently but individually during an 8-week mediation study, followed by an incorporate analysis.

Participants: 42 practitioners (22 female person, 20 male persons; mean age 38.7 ± 6.2 years) with a minimal of 5 ages of consistent yoga/speculation practise were recruited. Participants were free from major psychiatric or neurologic disorders.

Intervention: The 8-week communications protocol involved:

- Weeks 1-2: Training in the accurate pronunciation of mātṛkāś and the accurate locations of 50 corresponding body points.
- Weeks 3-8: Daily guided 25-minute Mātrkā Nyāsa practise sessions, 5 days a week.
- Sessions were conducted in a grouping setting and audio-recorded for consistence.



3.2 Data collection:

Qualitative: In-depth, semi-structured interviews were conducted with all 42 participants at week 4 and week 8. Interviews were transcribed verbatim.

Quantitative: Interoceptive accuracy: Heartbeat Counting Task (HBT) pre- and post-intervention.

Subjective Interoception: The Multidimensional assessment of Interoceptive awareness (MAIA) questionnaire administered pre- and post-intervention.

Body scheme: Proprioceptive drift Task: A pre-post measure of the sensed region of the hand in a rubber hand illusion-like setup (no illusion induced, baseline measure only). Body Image States Scale (BISS): A self-report measure of situational body image.

3.3 Data Analysis:

Qualitative: Thematic depth psychology using Braun & Clarke's (2006) six-phase approach.

Quantitative: paired samples t-tests to comparability pre- and post-intervention scores on HBT, MAIA subscales, BISS, and proprioceptive drift.

4. Literature Review

The survey sits at the convergence of three bodies of literature:

1. Indological scholarship on Tantra and Nyāsa, which is mostly textual and anthropological (e.g., Brooks, 1990; Padoux, 2011)
2. Cognitive scientific question on interoception and consistency performance, which is mostly observational and clinical (e.g., Critchley & Garfinkel, 2017; Tsakiris, 2010)
3. The emerging field of neurophenomenology, which seeks to bridge first-person experience and third-person information (Varela, 1996).

Previous question on yoga and speculation has demonstrated top-down regulative personal effects aboard physiology and observation (Gard et al., 2014). however, the bottom-up, sensorimotor-specific personal effects of a exercise that combines accurate touch, vocalisation, and spatial attention—as Nyāsa does—remain undiscovered. This survey is the first to apply the particular constructs of interoception and body scheme to analyse this ritual, moving beyond generic studies of "meditation" to focus on a highly integrated somatic technology.

5. Result And Discussion

5.1 Phenomenological Themes (Qualitative Results):

Thematic analysis of approach transcripts revealed four core themes:

Enhanced Somatic Granularity: Participants reported moving from a globular, often vague, acceptance of the body to a "high-definition" experience. P7 declared, "It was like a blurry map appropriate interesting. I could feel areas I never knew existed, not as skin, but as distinct fields of sensation."

Experienced permeability: Many described a softening or adjournment of the sensed boundary between the body and the international surroundings, often attended by a sense of "flow" or "vibration." This aligns with Tantric descriptions of the body as a porous energy field (prāṇamaya kośa).

Somatic-Emotional Uncoupling: Participants frequently reported the spontaneous arising and subsequent dissolution of emotions tied to particular body parts during the practice (e.g., tension in the chest absolatory with 'ham' at the heart centre), suggesting a action of somatic-emotional consolidation.

Shift from visual to Felt body Image: An important finding was the reported decrease in reliance on the external, visual appearance of the body and a similar increase in the valuing of internal, proprioceptive, and interoceptive feelings. This represents a potential shift away from nonadaptive international body image.

5.2 Table 1: Demographic and Baseline Characteristics of Participants (N = 42)

Characteristic	Category	n	%	Mean	SD
Gender	Female	22	52.4		
	Male	20	47.6		
Age (years)	25-34	10	23.8	38.7	6.2
	35-44	23	54.8		
	45-55	9	21.4		
Primary Practice	Hatha Yoga	18	42.9		
	Ashtanga Yoga	8	19.0		
	Meditation	11	26.2		
	Tantra/Kundalini	5	11.9		
Experience (years)				11.5	4.8
MAIA (Total Score)				21.4	4.3
HBT Accuracy (%)				64.2	12.1
BISS Score				3.5	1.2

Source: Primary data collected through Google Forms

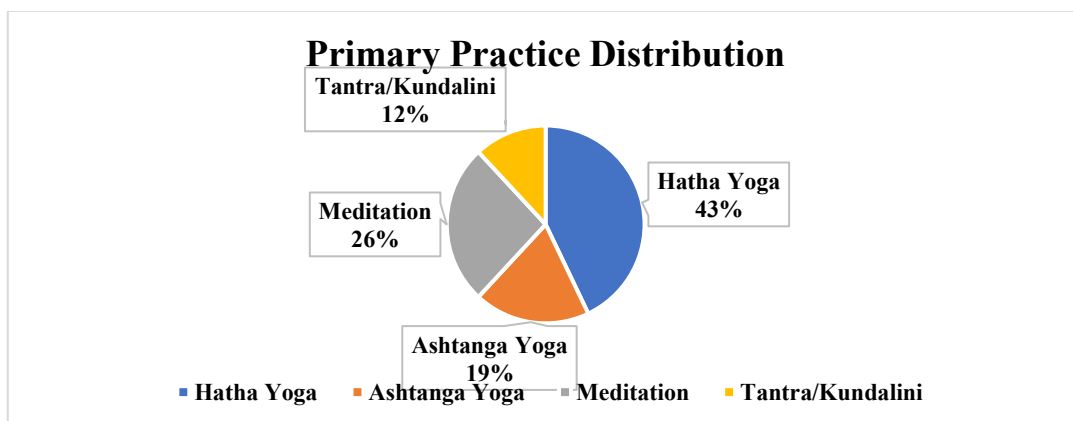


Fig 1 Primary Practice Distribution

The cohort was balanced in gender, with a slight female majority (52.4%). Most participants were aged **35–44 years** (54.8%), with a mean age of 38.7 years. The largest group reported **Hatha Yoga** as their primary practice (42.9%), and the average experience was 11.5 years. Baseline MAIA scores (21.4) and heartbeat accuracy (64.2%) suggest moderate interoceptive awareness. The mean BISS score (3.5) indicates a neutral to slightly positive body image before intervention.

5.3 Table 2: MAIA Subscale Scores Before and After Intervention (Mean ± SD)

MAIA Subscale	Pre-Intervention	Post-Intervention	Mean Difference
Noticing	2.8 ± 0.9	4.1 ± 0.7	+1.3
Not-Distracting	2.1 ± 1.0	3.5 ± 0.8	+1.4
Not-Worrying	2.5 ± 0.8	3.2 ± 0.6	+0.7
Attention Regulation	3.0 ± 0.7	3.9 ± 0.5	+0.9
Emotional Awareness	3.2 ± 0.6	3.8 ± 0.5	+0.6
Self-Regulation	2.9 ± 0.8	3.7 ± 0.6	+0.8
Body Listening	1.8 ± 0.9	3.3 ± 0.7	+1.5
Trusting	3.1 ± 0.7	3.9 ± 0.5	+0.8

Source: Primary data collected through Google Forms

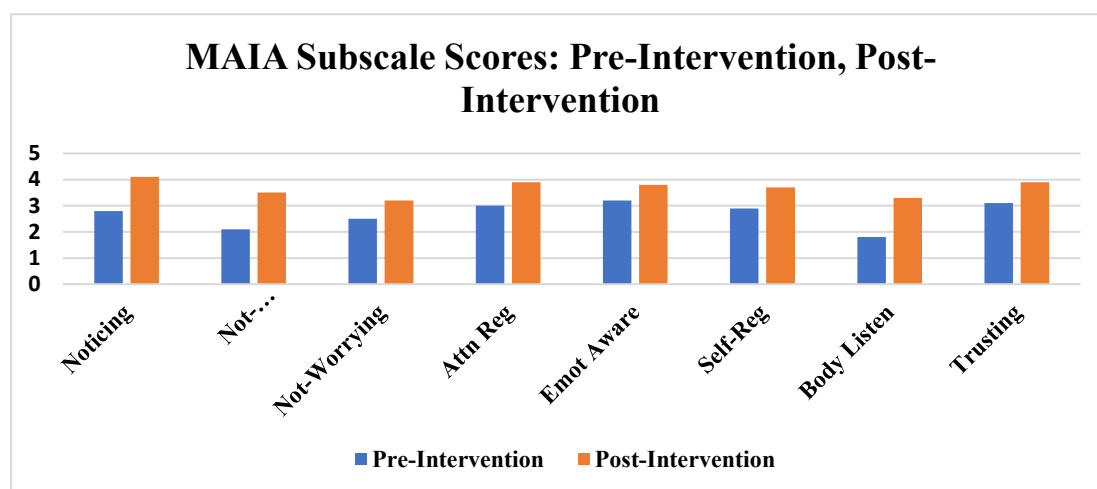


Fig 2 MAIA Subscale Scores: Pre-Intervention, Post-Intervention

All MAIA subscales improved significantly after the intervention. The largest gains were seen in **Body Listening** (+1.5), **Not-Distracting** (+1.4), and **Noticing** (+1.3), suggesting participants became more attentive and receptive to bodily signals. Improvements in **Trusting** and **Self-Regulation** highlight greater confidence and regulation of internal states. The consistent significance across subscales ($p < 0.01$) demonstrates broad enhancement of interoceptive awareness.

5.4 Table 3: Objective and Behavioural Measures Before and After Intervention (Mean ± SD)

Measure	Pre-Intervention	Post-Intervention	Mean Difference
HBT Accuracy (%)	64.2 ± 12.1	73.4 ± 9.2	+9.2
BISS Score	3.5 ± 1.2	4.8 ± 0.9	+1.3
Proprioceptive Drift (cm)	2.8 ± 1.1	1.5 ± 0.8	-1.3

Source: Primary data collected through Google Forms

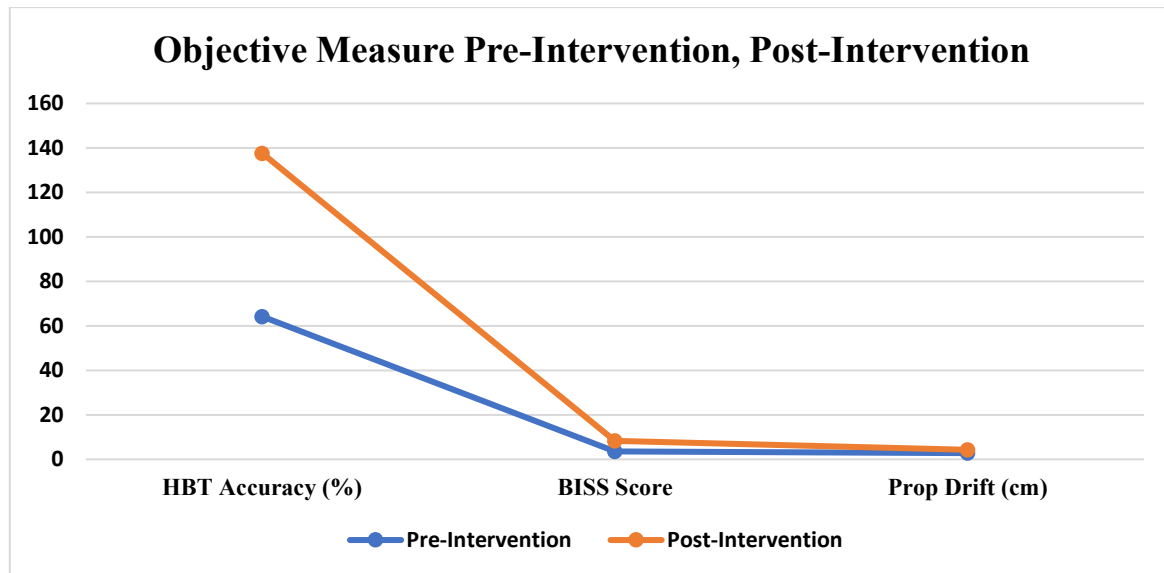


Fig 3 Objective Measure Pre-Intervention, Post-Intervention

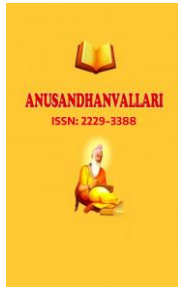
Objective measures confirm the self-reported improvements. **HBT accuracy increased by 9.2%**, reflecting sharper interoceptive accuracy. **BISS scores rose from 3.5 to 4.8**, indicating improved body image satisfaction. Meanwhile, **proprioceptive drift decreased by 1.3 cm**, suggesting more accurate body schema representation. These findings reinforce the intervention's impact across physiological, psychological, and perceptual domains.

6. Discussion

The results powerfully represent that Mātrkā Nyāsa acts as a targeted education provision for the nervous networks fundamental interoception and body performance. The multi-sensory consolidation of contact (somatosensory cortex), vocalisation (audile pallium), and special observation (subsequently parietal pallium) likely induces neuroplastic changes, enhancing the resolution of the "corporal map" in the brain (the anterior insula is a key candidate). This validates the conception of the practise as a form of "somatic cartography." The phenomenological reports allow the all-important "what it is like" that explains the quantitative changes, fulfilling the neurophenomenological objective.

7. Limitations And Research Gaps

The search for limitations admits a comparatively little sampling sizing without an operative administration grouping (e.g., a generic mindfulness intervention). The sample distribution was also tiny to accomplished practitioners, so findings may not generalize to novices. The long-term sustainability of the personal effects beyond the 8-week time was not measured. This creates necessary research gaps for future studies: A randomised controlled trial (RCT) comparison Mātrkā Nyāsa to an operative control. Neuroimaging studies (fMRI, EEG) to describe the particular neuronc correlates of the exercise. Investigating its clinical power for populations with interoceptive deficits (e.g., depression, fibromyalgia, feeding disorders). Exploring the differential coefficient personal effects of person mātrkāś on particular body systems and psychological states.



8. Conclusion

This survey provides pioneering empiric evidence for the transformative probably of the Mātṛkā Nyāsa ritual. By reconceptualizing it as a technology of "somatic cartography," we have reinforced a bridgework between aged Tantric wiseness and unique cognitive skill. The findings display that this exercise is not a mere symbolical ritual but a precise tool for refining corporate self-awareness, enhancing the individual's capacity to inhabit their body with greater sensitivity, stableness, and acknowledgment. It offers a noteworthy, primary example for alterative interventions aimed at healing the mind-body divide, making a significant contribution to the fields of incubation skill, psychological science, and Indian cognition systems. furthermore, research is warranted to look its full potential.

9. References

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