Overview of Navarasa

Modern affective neuroscience views emotions as embodied processes with distinct physiological signatures. Heart rate variability (HRV) reflects vagal regulation of cardiac rhythms, where higher HRV and coherent heart patterns correspond to positive emotional states, while low HRV indicates diminished self-regulation. EEG coherence, representing functional coupling across cortical regions, increases during emotional experiences, with positive emotions showing elevated frontal alpha and characteristic parietal beta activity.

Electrodermal activity (EDA), together with HRV, blood volume pulse, and skin temperature, reliably indexes sympathetic arousal. These physiological modalities collectively provide a robust framework for quantifying the "energy" inherent in emotional states, linking subjective affect to measurable bodily processes.

Paper 1: Navarasa and its conversion

The Nine Rasas express core emotions linked to distinct moods, colors, and deities, mirrored in HRV, EEG, and EDA coherence as physiological arousal markers; a small thermoelectric gradient generates, conceptually illustrating emotional energy conversion.

Paper 2: Conversion of Śṛṅgāra (Erotic) Rasa

Explores how śṛṅgāra rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 3: Conversion of Hāsya (Comic) Rasa

Explores how Hāsya (Comic) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 4: Conversion of Karuṇā (Pathetic) Rasa

Explores how Karuṇā (Pathetic) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 5: Conversion of Raudra (Furious) Rasa

Explores how Raudra (Furious) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 6: Conversion of Vīra (Heroic) Rasa

Explores how Vīra (Heroic) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 7: Conversion of Bhayānaka (Terrible) Rasa

Explores how Bhayānaka (Terrible) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 8: Conversion of Bībhatsa (Odious) Rasa

Explores how Bībhatsa (Odious) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 9: Conversion of Adbhuta (Marvellous)Rasa

Explores how Adbhuta (Marvellous) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 10: Conversion of Śānta (Tranquility)Rasa

Explores how Śānta (Tranquility) rasa influences physiological coherence**,** linking heart, brain, and skin responses, with thermal energy output as a novel indicator of emotional regulation.

Paper 11: Measurement of Śṛṅgāra Rasa

verifies that love (śṛṅgāra) increases HRV coherence and lowers EDA, producing a moderate ΔT rise, while testing if HRV, EEG, and thermal measures can classify śṛṅgāra states with accuracy above 70%**.**

Paper 12: Measurement of Hāsya Rasa

Examines Hasya (laughter) Rasa, tracking rapid HRV and EDA fluctuations and increased ΔT during laughter, and tests whether these physiological patterns can reliably classify laughter episodes**.**

Paper 13: Measurement of Karuṇā Rasa

Investigates Karuṇā (sorrow) Rasa, examining decreases in HRV coherence and ΔT alongside increased EDA and theta power, and tests whether these physiological patterns can distinguish sorrow from peaceful and fear states.

Paper 14: Measurement of Raudra Rasa

Examines Raudra (anger) Rasa, assessing maximal ΔT and power output alongside strong sympathetic activation, and tests whether HRV, EDA, and EEG patterns can classify anger episodes with over 80% accuracy.

Paper 15: Measurement of Vīra Rasa

Investigates Vīra (heroism) Rasa, examining balanced autonomic activation and moderate ΔT increases, and tests whether HRV coherence and beta power can distinguish heroic states from anger and wonder.

Paper 16: Measurement of Bhayānaka Rasa

Explores Bhayānaka (fear) Rasa, assessing decreases in skin temperature and ΔT alongside elevated EDA, and tests whether HRV and EDA patterns can accurately classify fear states.

Paper 17: Measurement of Bībhatsa Rasa

Examines Bībhatsa (disgust) Rasa, tracking reduced HRV coherence and skin temperature alongside increased EDA, and tests whether these physiological patterns can reliably distinguish disgust from anger and fear.

Paper 18: Measurement of Adbhuta Rasa

Investigates Adbhuta (wonder) Rasa, examining a biphasic pattern of initial EDA spikes followed by increased HRV coherence and transient ΔT peaks, and tests whether these temporal physiological features can accurately classify wonder states.

Paper 19: Measurement of Śānta Rasa

Examines Śānta (peace) Rasa, assessing reduced physiological arousal and stable or decreased ΔT, and tests whether HRV and EEG alpha/theta coherence can accurately classify peaceful states.