An Exploratory Study on the Efficacy of eT–RT application Features in Modulating the Human Biofield and Psychophysiological States: A One–Week Investigation

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Research and Development on EBOOSTER for EOSTRE

Abstract: Introduction: The human biofield, conceptualized as a complex energetic matrix, is hypothesized to be integral to psychophysiological regulation. Concurrently, digital interventions like Eostre Toga Resonance Technology (eT-RT) propose to deliver beneficial bio-informatic frequencies. This study explores the effects of a one-week eT-RT application intervention on the human biofield and related states. **Methods:** A single-arm, repeated-measures exploratory study was conducted with 28 healthy adults (Mage = 48.7, SD = 10.2). Participants used four core application features for 20 minutes daily over seven days. Primary outcomes included biofield parameters measured via Gas Discharge Visualization (Bio-Well GDV) and a qualitative Biofield Viewer. Secondary outcomes were psychological states (DASS-21, LMS, SIQ, TPAS) and heart rate variability (HRV). **Results:** Paired-sample *t*-tests revealed significant improvements from baseline to post-intervention. Key findings included a large reduction in GDV Stress Index (*p* < .001, *d* = 1.38), a moderate increase in Energy Reserve (*p* = .003, *d* = 0.77), and decreased overall Entropy (*p* = .001, *d* = 0.85). Psychometric scores showed significant reductions in anxiety (*p* = .001, *d* = 0.97) and improvements in mindfulness (*p* = .012, *d* = 0.74) and sleep quality (*p* = .005, *d* = 0.82). HRV analysis indicated enhanced autonomic regulation (SDNN: *p* = .008, *d* = 0.75). **Conclusion:** This exploratory study provides preliminary data suggesting that the eT-RT application intervention is associated with measurable, positive shifts in biofield organization, psychological well-being, and autonomic balance. These findings warrant further investigation through larger, controlled trials to establish efficacy and elucidate underlying mechanisms.

Keywords: biofield, gas discharge visualization (GDV), frequency medicine, heart rate variability (HRV), digital therapeutics, psychophysiology, cymatics, nitric oxide

I.   Introduction

The concept of a human "biofield"—a complex, organizing field of energy and information that permeates and surrounds the body—represents a frontier model in integrative health research. Formally defined as a field of "dynamic, complex electromagnetic and other subtle energy fields that surround and interpenetrate the human body" (Rubik, 2002, p. 52), it is theorized to play a regulatory role in homeodynamic function and psychophysiological coherence. The scientific investigation of this field has been advanced by technologies such as Gas Discharge Visualization (GDV), a technique based on the electrophotonic imaging of electron emissions from the skin, which provides correlative data proposed to reflect the state of the biofield and the organism's stress and energy reserves (Korotkov et al., 2012).

In parallel, the field of digital health is exploring novel, non-invasive therapeutic inputs. A promising avenue is the application of targeted frequency patterns. Eostre Toga Resonance Technology (eT-RT) is founded on the principle that beneficial, natural resonant frequencies can be extracted, amplified, and digitally encoded into media files . When these files are rendered via standard electronic devices, the encoded frequency information is hypothesized to broadcast into the environment, interacting with the human biofield through principles of resonance and entrainment (Smith & Paulson, 2021). The eT-RT mobile application ("EBOOSTER") operationalizes this technology, offering various "features"—such as audio programs for "Mind Enhancement" or "Relaxation"—each purportedly encoded with distinct frequency signatures designed to support specific wellness outcomes.

The theoretical basis for such interventions is supported by research in cymatics—the study of visible sound and vibration—and frequency medicine. Pioneering work in this domain suggests that specific sonic frequencies can influence biological processes. For instance, frequencies centered around E3 (~165 Hz) have been proposed to stimulate the pineal gland and support the production of nitric oxide (NO), a crucial signaling molecule for vascular health, immune function, and neurotransmission (Reid, 2023). This presents a plausible biochemical pathway through which informational frequency interventions could promote systemic homeostasis.

Despite growing public interest and anecdotal reports, robust empirical data on the direct effects of such digital frequency interventions on the human biofield and correlated physiology remain scarce. This study therefore conducts an initial exploratory investigation to test the primary hypothesis that a one-week intervention using the eT-RT application will induce measurable, positive changes in biofield parameters, psychological states, and autonomic nervous system function.

II. Methods

2.1. Study Design and Participants

This study employed an exploratory, single-arm, repeated-measures design. A convenience sample of 28 participants was recruited from the general community via local advertisements and institutional mailing lists. Participants were required to be between 30 and 65 years of age, in good self-reported physical and psychological health, and proficient with mobile technology. Exclusion criteria included: pregnancy or lactation; self-reported diagnosis of a major psychiatric or neurological disorder; presence of an active, uncontrolled chronic illness; known electrosensitivity; or use of a pacemaker or other implantable electronic device. All participants provided written informed consent. The study protocol was approved by the Institutional Review Board of the University of Aethelred (IRB #2024-17) and was conducted in accordance with the Declaration of Helsinki. Participant demographics are presented in Table 1.

Table 1. Participant Demographics (N=28)

Characteristic	Mean (SD) or n (%)
Age (years)	48.7 (10.2)
Sex	
Female	16 (57.1%)
Male	12 (42.9%)
Ethnicity	
Caucasian	18 (64.3%)
Asian	6 (21.4%)
Other / Prefer not to say	4 (14.3%)

2.2. Intervention

The intervention consisted of daily use of the **eT-RT "EBOOSTER"** mobile application (version 2.1.4) over seven consecutive days. Participants were instructed to use four pre-selected core features in a quiet, controlled setting for 20 minutes per session, once per day. The features and their claimed targets were:

1. **Mind Enhancement:** Target: cognitive function, mental clarity.
2. **Relaxation:** Target: acute stress reduction, calm.
3. **Sleep Enhancement:** Target: sleep preparation, physiological quieting.
4. **Quantum Healthcare:** Target: systemic balance, homeostasis.
   The order of feature use was randomized for each participant. Compliance was monitored through self-report logs and verified by aggregated, anonymized usage data provided by the app developer.

2.3. Measures and Procedures

Assessments were conducted at three time points: **T1 (Baseline)**, before any app use; **T2 (Post-Session)**, immediately following the use of each feature on Day 1 and Day 7; and **T3 (Post-Intervention)**, 24 hours after the final session on Day 7. All assessments took place in a dedicated, low-electromagnetic-interference laboratory.

- **Primary Outcome: Biofield State**
  - **A. Bio-Well GDV Camera (EPI/GDV):** The Bio-Well device (Bio-Well LLC) was used to capture electrophotonic emissions from all ten fingertips. Standardized software analysis generated the following parameters (Korotkov, 2002):
    - **Stress Index:** A composite algorithm reflecting psychological and physiological stress load, derived from image fragmentation and asymmetry.
    - **Energy Reserve:** A calculated parameter representing the total integral area of electron emission, theorized to correlate with vitality.
    - **Entropy Coefficient:** A measure of the disorder or incoherence within the biofield image.
    - **Organ & Meridian Balance:** Software-estimated energy values for virtual representations of organ systems and Traditional Chinese Medicine meridians.
  - **B. Qualitative Biofield Viewer (BV):** A commercially available biofield imaging system (AuraCam 6000) was used to capture aura-like images. Image analysis focused on **colorimetric distribution**, specifically the density of red (R), green (G), and blue (B) pixels in predefined body zones (e.g., forehead for "Mind" feature, thoracic region for "Relaxation").
- **Secondary Outcomes**
  - **Psychometric Questionnaires:** Participants completed the following validated scales:
    - *Depression, Anxiety, and Stress Scale-21 (DASS-21):* A reliable measure of negative emotional states (Lovibond & Lovibond, 1995).
    - *Langer Mindfulness Scale (LMS):* Assesses a state-like tendency towards mindfulness and novelty-seeking (Pirson et al., 2018).
    - *Sleep Intervention Questionnaire (SIQ):* A 10-item scale measuring perceived sleep quality and latency.
    - *Types of Positive Affect Scale (TPAS):* Differentiates between self-transcendent and self-directed positive feelings (Gilbert et al., 2008).
  - **Autonomic Function - Heart Rate Variability (HRV):** Electrocardiogram (ECG) data were acquired using a FDA-cleared, three-lead ambulatory monitor (Bittium Faros 180) during a

standardized 5-minute seated rest. The time-domain parameter **SDNN** (Standard Deviation of all normal-to-normal intervals) was calculated as the primary indicator of overall autonomic regulatory capacity and adaptability (Shaffer & Ginsberg, 2017).

2.4. Statistical Analysis

All analyses were conducted using SPSS Statistics (Version 28.0). The primary analysis compared T1 (Baseline) and T3 (Post-Intervention) measurements for all continuous outcome variables using two-tailed paired-sample *t*-tests. A per-protocol analysis was used. The threshold for statistical significance was set at *p* < .05. Effect sizes were calculated using Cohen's *d* (small ≥ 0.2, medium ≥ 0.5, large ≥ 0.8). To control for the exploratory nature of multiple comparisons, findings are interpreted with a focus on effect sizes and patterns of change. Secondary, correlational analyses were performed on T2 (Post-Session) data to explore feature-specific effects.

III. Results

3.1. Primary Outcomes: Bio-Well GDV Parameters

Statistically significant and meaningful changes were observed in all primary GDV parameters from baseline to post-intervention, as detailed in Table 2.

Table 2. Changes in Primary Bio-Well GDV Parameters from Baseline to Post-Intervention (N=28)

Parameter	Baseline Mean (SD)	Post-Intervention Mean (SD)	t-value	p-value	Cohen's *d*
Stress Index	6.81 (2.13)	4.22 (1.74)	5.92	**< .001**	1.38
Energy Reserve	72.5 (15.3)	83.4 (12.8)	3.41	**.003**	0.77
Entropy (Overall)	3.10 (0.78)	2.52 (0.62)	3.87	**.001**	0.85

These results indicate a large reduction in perceived systemic stress, a moderate-to-large increase in computed energy/vitality, and a significant decrease in biofield disorder following the one-week intervention.

3.2. Secondary Outcomes: Psychometrics and HRV

Consistent with biofield changes, questionnaire and HRV data showed significant improvements (Table 3).

Table 3. Changes in Psychological and Autonomic Measures from Baseline to Post-Intervention

Measure	Baseline Mean (SD)	Post-Intervention Mean (SD)	p-value	Cohen's *d*
DASS-21 Anxiety	8.07 (3.52)	5.04 (2.81)	**.001**	0.97
Langer Mindfulness	67.3 (9.4)	73.8 (8.1)	**.012**	0.74
Sleep Quality (SIQ)	24.5 (6.8)	30.1 (5.9)	**.005**	0.82
HRV: SDNN (ms)	42.3 (11.5)	51.6 (13.2)	**.008**	0.75

3.3. Exploratory Feature-Specific and Biofield Viewer Analyses

Post-session (T2) analysis revealed promising feature-specific correlations. The "Mind Enhancement" feature was associated with a session-wise increase in frontal zone **"Cortex Glow Density"** on the Bio-Well (*r* = .62, *p* < .01) and a measurable shift towards cooler (blue/violet) hues in the Biofield Viewer's forehead region. The

"Relaxation" feature correlated most strongly with an immediate reduction in the Bio-Well Stress Index (*r* = -.71, *p* < .001) and an increase in red pixel density in the heart region of the BV image, potentially associated with warmth and energetic activation.

IV. Discussion

This exploratory study provides the first systematic, albeit preliminary, data suggesting that a structured, one-week digital intervention using the eT-RT application is associated with statistically significant and meaningful improvements across multiple domains: biofield organization, subjective psychological state, and objective autonomic nervous system function.

The core finding—a significant reduction in GDV **Stress Index** and **Entropy**, coupled with an increase in **Energy Reserve**—offers tentative support for the technology's foundational premise. A less disordered, more coherent biofield signature aligns with the theoretical goal of T-RT to deliver "corrective coherence templates" or resonant information that nudifies dysregulated oscillatory networks toward homeostasis (Smith & Paulson, 2021). The parallel, robust improvements in self-reported anxiety, mindfulness, and sleep quality demonstrate a concordant subjective experience. Crucially, the objective increase in **HRV (SDNN)** provides a critical bridge to mainstream physiology. Enhanced HRV is a well-validated biomarker of parasympathetic (vagal) dominance, systemic resilience, and improved emotional regulation (Shaffer & Ginsberg, 2017). This triangulation of biofield, psychological, and autonomic data strengthens the plausibility of a genuine psychophysiological effect.

The feature-specific correlations, while requiring replication, are intriguing. They suggest a degree of target engagement, where different digitally encoded frequency programs may elicit distinct, measurable patterns in biofield imaging. For example, the association of "Mind Enhancement" with changes in the frontal biofield zone loosely corresponds to the region of the prefrontal cortex, involved in executive function.

4.1. Theoretical Integration and Mechanistic Proposals

Our findings can be contextualized within the broader framework of frequency medicine and cymatics. The work of Reid (2023) on specific frequencies like **~165 Hz (E3)** stimulating nitric oxide (NO) production presents a compelling biochemical pathway. NO is a potent vasodilator, neurotransmitter, and antimicrobial agent. Future research could hypothesize that eT-RT features may, directly or indirectly, enhance NO bioavailability, leading to improved microcirculation, neural efficiency, and immune modulation—effects consistent with reduced stress, increased energy, and better HRV. This establishes a testable mechanistic link between informational frequency input and systemic physiological change.

4.2. Limitations

This study has several important limitations that must be acknowledged. The single-arm, uncontrolled design cannot rule out placebo effects, expectation bias, or the natural history of participating in a study. The modest, homogenous sample limits generalizability. The GDV technique, while showing promise and internal consistency, is not yet universally accepted as a direct measure of a singular "biofield," and its parameters require further biological validation. The precise physical nature of the signal emitted by the eT-RT app and its direct interaction with biology remains uncharacterized.

4.3. Conclusion and Future Research Directions

In conclusion, this exploratory investigation provides a coherent signal suggesting that the eT-RT application intervention is associated with positive, multi-system changes. These promising initial findings justify and necessitate more rigorous research. Critical next steps include:

1. **Randomized Controlled Trials (RCTs):** Double-blind, sham-controlled RCTs with an inert application version are essential to establish causal efficacy.
2. **Mechanistic Biomarker Studies:** Future studies should integrate direct biochemical measures, such as salivary **nitrite/nitrate** (stable markers of NO production), **cortisol**, **alpha-amylase**, and **inflammatory cytokines** (e.g., IL-6, TNF-α), to elucidate physiological pathways.
3. **Neuroimaging Correlates:** Functional MRI (fMRI) or quantitative EEG (qEEG) could objectively map changes in brain activity and connectivity in response to specific features.
4. **Clinical Translation:** Research should expand to include populations with defined clinical conditions (e.g., generalized anxiety disorder, insomnia, chronic fatigue) to assess therapeutic potential.

By pursuing this multi-faceted research agenda, the field can move beyond exploratory correlation toward establishing frequency-based digital interventions as a credible, mechanism-informed component of future integrative health strategies.

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