

Investigation of the Effect of the Faradarmani Consciousness Field on the Absolute Brain Power of Faradarmangars with a Focus on Brainwave Types

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DOI: <https://doi.org/10.61450/joci.v4i19.225>

Abstract

There have been numerous studies evaluating changes in absolute power and brainwaves under various treatments, including mind-body interactions. In the present study, the effects of the Faradarmani Consciousness Field on these parameters were investigated. The influence of this field is initiated through a brief moment of attention via the human mind. Although the human announcement plays a key role in initiating Faradarmani, the observed changes are attributed to the effects of the field itself, as the process does not involve any techniques such as breathing exercises, visualization, or other conventional mind-body practices. In the experimental design, during Rest 1, the trained participants, referred to as Faradarmangars, were asked to remain simply relaxed and tension-free. After that, upon hearing the sound of a horn, the individual initiates a 10-minute application of the Faradarmani Consciousness Field, referred to as the task. Following the second beep, the termination of the Faradarmani effect is announced, and the next three minutes are considered Rest 2. The data obtained from the task were also analyzed in three equal time intervals, labeled Task 1, Task 2, and Task 3. The results show the greatest contrast between Rest 1 and Task 1, indicating that the Faradarmani Consciousness Field caused a reduction of approximately 10% to 35% in absolute power across frequency bands up to, but not including, the high-frequency and fast waves. This average reduction in absolute power within the high beta and gamma ranges appears, showing values between 6-8% during Task 2 and Task 3, demonstrating that these segments are also capable of reflecting the field's effects.

Keywords: Fast waves, Slow waves, Absolute power, Electroencephalography

Introduction

Consciousness has been a central topic in neuroscience as well as in other scientific fields, such as physics and philosophy. Modern advances in neuroimaging and electrophysiology have enabled researchers to investigate the neural correlates of consciousness with increasing precision (Yen et al., 2023). One prominent approach in this field involves the analysis of brain activity patterns, particularly through electroencephalography (EEG), which offers a non-invasive method to measure electrical activity in the brain with high temporal resolution. EEG-based parameters, including brainwave frequency bands and absolute power values, are commonly used to explore changes associated with different mental states, levels of awareness, and states of altered consciousness such as sleep, meditation, or focused attention (Perrottelli et al., 2021; Corona-González et al., 2021).

Brainwave activity is typically categorized into five main frequency bands, each associated with specific mental states. Gamma waves, with frequencies above 35 Hz, are often linked to heightened concentration and cognitive processing. Beta waves, ranging from 12 to 35 Hz, are dominant during active mental states, external attention, and sometimes anxiety, though they can also reflect a relaxed but alert state. Alpha waves, occurring in the 8 to 12 Hz range, are associated with deep relaxation and passive attention, often observed during restful wakefulness. Theta waves, between 4 and 8 Hz, are linked to a deeply relaxed state and inward-focused mental activity, such as daydreaming or meditation. Finally, delta waves, ranging from 0.5 to 4 Hz, are characteristic of deep sleep and unconscious states. These frequency bands provide a valuable framework for interpreting EEG data in both clinical and consciousness-related research (Abhang et al., 2016; Siuly et al., 2016).

Additionally, EEG signals provide valuable insights into brain function and dysfunction in clinical settings. Abnormalities in brainwave

activity have been associated with a range of neurological and psychiatric conditions (Başar and Güntekin, 2008). For instance, increased theta and delta activity is often reported in epilepsy, while imbalances in alpha and beta waves have been linked to depression and attention-deficit/hyperactivity disorder (ADHD) (Clarke et al., 1998; Ksibi et al., 2023). Furthermore, studies of mind-body interactions, such as mindfulness, meditation, and other consciousness-based practices have shown that such interventions can modulate brainwave patterns, revealing their potential therapeutic benefits and underlying mechanisms (Tang et al., 2015; Travis and Shear, 2010).

Method

Forty-four healthy adult participants (mean age: 41 ± 7 years), none of whom had used any neurological or psychiatric medications in the six months prior to the test day, were included in the study group. Of these participants, 41% were male ($n=18$) and 59% were female ($n=26$). The Faradarmani Consciousness Field treatment was initiated by the participants at a predetermined time (upon hearing a soft beep sound from the computer system located on the desk in front of the seating area). In this study, a task referred to the action in which Faradarmangars personally initiated a connection with the Cosmic Consciousness Network. The study was approved by the Ethics Committee of Iran University of Medical Sciences (Approval ID: IR.IUMS.REC.1402.940).

The time intervals were defined as follows:

1. Rest 1: In this stage, the trained participants, referred to as *Faradarmangars*, were asked not to engage any type of T-Consciousness Fields and to remain simply relaxed and tension-free. The aim of this stage was to collect baseline data for each individual as a control before applying the FCF, which is useful for creating a collective control dataset.
2. Task: At the beginning of Rest 1, upon

hearing the sound of a horn—predefined before the experiment—the participants initiated their connection with the FCF, marking the beginning of Task 1. In fact, the task involved a continuous connection for 10 minutes. During this stage, data was continuously collected from the participants' brains. In the analysis phase, the data was examined both as a whole and in three equal, consecutive intervals, referred to as Task 1, Task 2, and Task 3. The purpose of this segmented analysis was to evaluate how the FCF affects the brain over time.

3. Rest 2: Another three-minute stage followed, during which the participants disengaged from their connection with the FCF upon hearing the second horn sound, as defined prior to the experiment. Similar to Rest 1, they remained relaxed and tension-free without using the FCF.

EEG data acquisition

The participants' brain electrical activity was recorded at the National Brain Mapping Laboratory (NBML) of Iran using the g.tec g.HIamp system (g.tec, Graz, Austria) with a 128-channel cap equipped with passive Ag/AgCl electrodes. The electrodes were evenly distributed across the scalp based on the international 10/20 system for electrode placement. The ground electrode was placed on the forehead, and the online reference was positioned on the right earlobe. Data was recorded with a sampling frequency of 512 Hz, and impedance was maintained below 10 k Ω .

Data Processing

The EEG data were preprocessed using the EEGLAB (Delorme and Makeig, 2004) and FieldTrip (Oostenveld et al., 2011) toolboxes for MATLAB (MATLAB R2016a, The MathWorks, Inc., Natick, MA, USA). High-pass filters (with a cutoff frequency of 2 Hz) and band-stop filters (to remove 50 Hz line noise and its harmonic frequencies) were applied to the raw data. The data were re-referenced to the common average

reference, and artifacts were manually rejected through visual inspection using EEGLAB. Independent Component Analysis (ICA) was performed to remove artifact-related components (e.g., head and eye movements, heartbeat, and muscle tone). The preprocessed data, containing minimal artifacts, were segmented into different rest and task phases according to the study design. FieldTrip was then used for further EEG data processing.

Frequency domain analysis is performed using the Fast Fourier Transform (FFT) algorithm (with a resolution of 0.125 Hz) to calculate the absolute power density ($\mu\text{V}^2/\text{Hz}$). The absolute power of a band is the integral of all power values within its frequency range. The mean (overall) frequency (Hz) is also obtained from the entire analyzed spectrum (1 to 30 Hz) (Yuvaraj et al., 2024).

Data analysis

Descriptive statistical analysis, frequency distribution analysis, and chart plotting were performed using GraphPad software version 9. Entropy calculations were carried out using SPSS software version 28. Differences between time-based populations were analyzed using two-way ANOVA. A p-value threshold of 0.05 was considered for significance; any change with a p-value less than this threshold was regarded as statistically significant, while changes above this value were considered non-significant (ns).

Results and Discussion

As shown in Figure 1, when comparing total absolute power, Task 1 shows the greatest difference compared to Rest 1, which serves as the main control in this study. Following that, significant decreases in absolute power are also observed between Rest 1 and Rest 2, which is considered the secondary control in this research. These changes indicate that the effect of the Faradarmani Consciousness Field persisted after the task and showed significant differences compared to before the application of this field.

As mentioned in the Introduction section, delta waves are typically associated with unconscious states. The significant reduction observed in Task 1 compared to Rest 1 may reflect a shift toward information reception or an elevated state of alertness. The subsequent significant increase during the middle and later stages of exposure to Faradarmani may reflect a phase of internal regulation and processing, possibly resulting from the reception of information and leading toward a return to a modulated state. Notably, the reduction observed in Rest 2, which mirrors the pattern seen in Task 1, suggests that the effects of Faradarmani extend beyond the immediate period of exposure. Instead of reverting to the pre-Faradarmani baseline, the brain may remain in a more attuned or regulated state, indicating a lasting influence. In the context of meditation and neural oscillations, the functional role of delta frequency remains relatively underexplored (Lee et al., 2018). However, in meditation studies, delta activity often increases or exhibits complex dynamics related to attentional engagement and internalized awareness (Cahn et al., 2013).

Theta wave activity showed a significant reduction at nearly all measured time points after Rest 1. This observation may underscore a key difference between the effects of Faradarmani and typical meditation practices, as the latter are generally associated with an increase in theta activity (Baijal et al., 2010; Pasquini et al., 2015).

Unlike typical meditative states, particularly mindfulness, which are often associated with increased alpha activity (Lomas et al., 2015), a significant reduction in both alpha-1 and alpha-2 bands was observed during Task 1 compared to Rest 1. This pattern closely resembles the alterations seen in delta activity under the influence of the Faradarmani Consciousness Field. These findings suggest a shift from a passive resting state toward heightened alertness, potentially reflecting the brain's response to receiving information from the Faradarmani Consciousness Field.

Beta waves are typically associated with engaged mental activity (Magazù and Caccamo, 2024).

The initial sharp reduction observed during Task 1 may reflect an immediate calming effect of the Faradarmani Consciousness Field on the neural system, possibly by disengaging habitual patterns of mental activity. The gradual increase in beta wave activity during Tasks 2 and 3 may suggest that the brain was undergoing a reorganization process under the influence of a new state, reflecting dynamic system behavior. The increase observed during Rest 2 could indicate a homeostatic adjustment following the earlier downregulation. Moreover, this upward trend may be associated with a form of alertness or expanded awareness, potentially arising from the reception of information through Faradarmani.

In the high beta range, changes in Task 1 are not significant, but in Tasks 2 and 3, they are significantly lower compared to Rest 1. Similarly, in the gamma range, a significant decrease is observed in the middle and end of the task, which then increases during Rest 2, returning to the level of Rest 1. In fact, the application of the Faradarmani Consciousness Field does not immediately lead to an intense activation or reduction in brain activity. The effects of this field become evident in the middle and end of the task, showing a decreasing trend, which then increases again after the field is no longer applied, during Rest 2, and returns to the level of Rest 1 or the pre-experiment baseline. It has been reported that in mental processes such as attention, learning, and conscious perception, as well as in meditations and mental practices, gamma wave activity increases (Fries et al., 2001; Lutz et al., 2004; Sahu and Tseng, 2023). According to the T-Consciousness Fields theory, the brain has a passive and receptive role. A major distinction of this theory compared to other mind-body approaches is the assumption that information is transmitted from these fields, and after mental processing, its effects become measurable in the brain as the receiver. In the current study, the reduction in gamma waves under the influence of the Faradarmani Consciousness Field demonstrates the distinct effect of these fields compared to meditation methods, and suggests a reduction in neural activity.

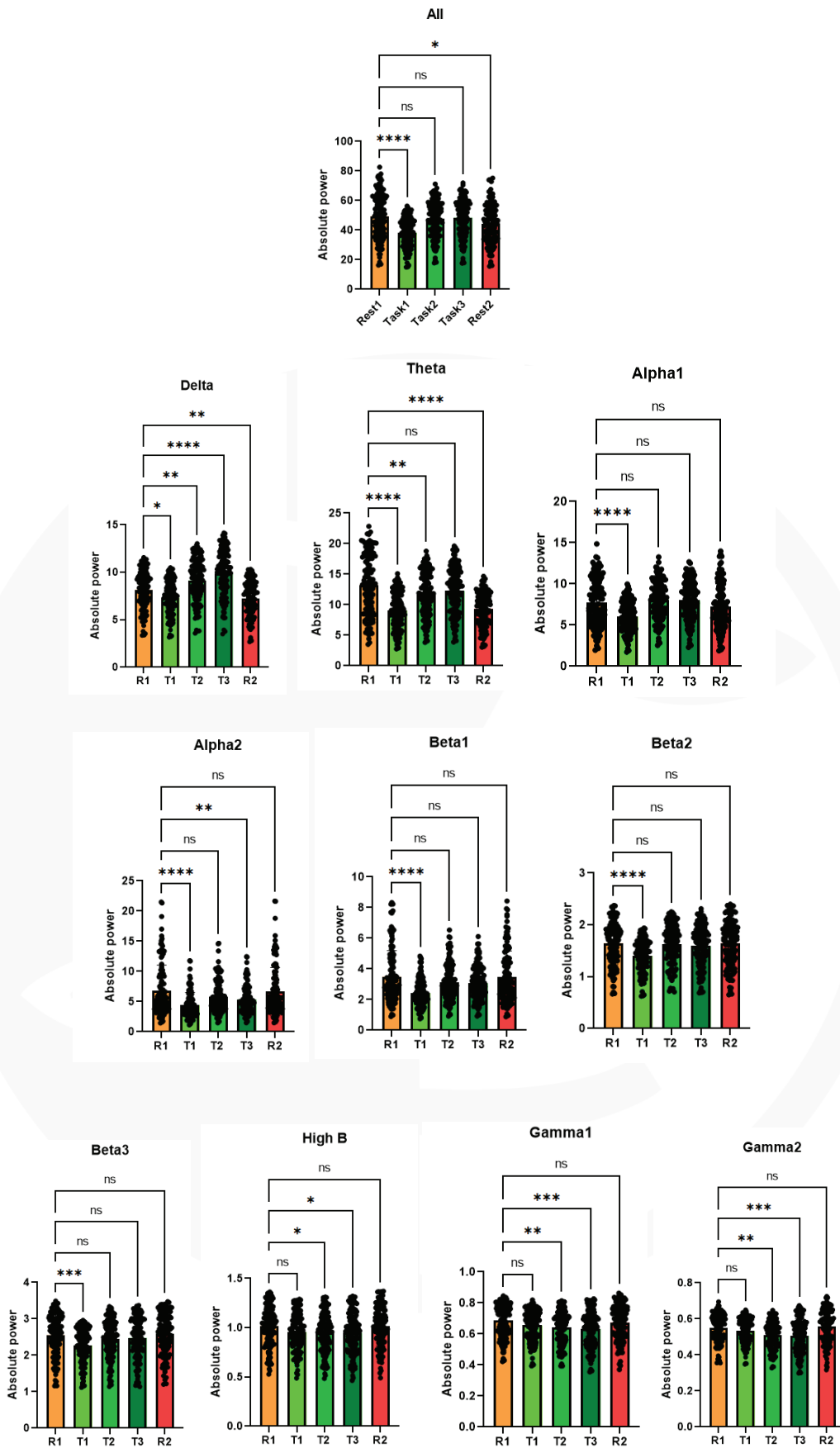


Figure 1. Comparison of the mean absolute power across the study population, categorized by different brainwave bands in various rest and task regions.

To observe the trend of changes, the values related to the mean absolute power are presented in their original form and in contrast to Rest 1 in Tables 1 and 2, respectively. Additionally, the normalized values relative to the absolute power

of the R1 segment for each frequency band are shown in Figures 2 to 4.

Table 1. Absolute power values across the frequency bands in this study.

Time Frame	Mean of absolute power				
	1: R1	2: T1	3: T2	4: T3	5: R2
All	49.42	38.28	47.51	48.37	44.21
Delta	8.168	7.319	9.147	9.846	7.249
Tetha	13.23	9.069	11.7	12.26	9.338
Alpha1	7.743	6.027	8.092	8.003	7.249
Alpha2	6.82	4.434	5.761	5.354	6.63
Beta1	3.485	2.433	3.118	3.072	3.481
Beta2	1.645	1.404	1.623	1.591	1.65
Beta 3	2.555	2.271	2.444	2.476	2.584
High B	1.019	0.9563	0.9477	0.9474	1.017
Gamma1	0.6856	0.6552	0.641	0.6326	0.6744
Gamma2	0.5483	0.5325	0.5093	0.5063	0.5573

Table 2. Comparison of percentage changes in mean values across different brain frequency bands relative to the R1 (Rest or Control 1) segment – significant changes are shown in italics. Colors matching the total power indicate similar changes within $\pm 3\%$; lighter green indicates smaller or decreasing changes, while darker green represents changes in the same direction as total power but with greater magnitude. Red indicates changes that are not aligned with total power or reflect increases.

	Change in the absolute power			
	T1-R1	T2-R1	T3-R1	R2-R1
All	-22.5415	-3.86483	-2.12465	-10.5423
Delta	<i>-10.3942</i>	<i>11.9858</i>	<i>20.54358</i>	<i>-11.2512</i>
Tetha	<i>-31.4512</i>	<i>-11.5646</i>	<i>-7.33182</i>	<i>-29.418</i>
Alpha1	<i>-22.162</i>	<i>4.507297</i>	<i>3.357872</i>	<i>-6.37996</i>
Alpha2	<i>-34.9853</i>	<i>-15.5279</i>	<i>-21.4956</i>	<i>-2.78592</i>
Beta1	<i>-30.1865</i>	<i>-10.5308</i>	<i>-11.8508</i>	<i>-0.11478</i>
Beta2	<i>-14.6505</i>	<i>-1.33739</i>	<i>-3.28267</i>	<i>0.303951</i>
Beta3	<i>-11.1155</i>	<i>-4.34442</i>	<i>-3.09198</i>	<i>1.135029</i>
Hbeta	<i>-6.15309</i>	<i>-6.99706</i>	<i>-7.0265</i>	<i>-0.19627</i>
Gamma1	<i>-2.88163</i>	<i>-7.11289</i>	<i>-7.66004</i>	<i>1.641437</i>
Gamma2	<i>-4.43407</i>	<i>-6.50525</i>	<i>-7.73046</i>	<i>-1.63361</i>

As shown in Tables 1 and 2, the total absolute power in Task 1 decreases by more than 20% compared to Rest 1, while this reduction is not statistically significant in Tasks 2 and 3. On the other hand, Rest 2 also shows a difference from Rest 1, though to a lesser extent. Regarding the slow waves, delta and theta, the changes in contrast to Rest 2 are aligned with and approximately equal to those observed in Task 1 contrast. For delta waves, after a significant decrease in Task 1 contrast, similar to the trend seen in most other waves, a significant increase in absolute power is observed in Tasks 2 and 3 contrast, unlike theta waves. This pattern is not seen in any other frequency bands in the subsequent regions. Delta waves are typically recorded during deep sleep when brain activity is at its lowest (Roohi-Azizi et al., 2017), and they have also been reported in states of deep meditation (Kora et al., 2021).

The changes in absolute power in the contrast related to Rest 2, from the alpha wave range onward, are less than approximately 6% (in both decreasing and increasing directions),

and consistent with statistical analysis, the differences in means are not significant. In fact, in this range, the average values indicate no notable difference between the rest conditions. On the other hand, in the alpha and beta wave ranges, the significant differences are predominantly observed in the Task 1 contrast (except for the alpha 2 band in Task 3), which highlights the practical value of Task 1 in detecting the effects of the field within the alpha and beta ranges. Moreover, in the high-frequency ranges (high beta, gamma 1, and gamma 2), Tasks 2 and 3 show the field's effects through changes in mean absolute power.

Figure 2 compares the normalized trend of changes relative to the absolute power of the total Rest 1 segment across three low-frequency brainwave bands (Delta, Theta, and Alpha 1). A trend similar to the overall pattern is observed; the absolute power in Rest 2 for Delta and Alpha 1 tends to return to the level seen in Rest 1.

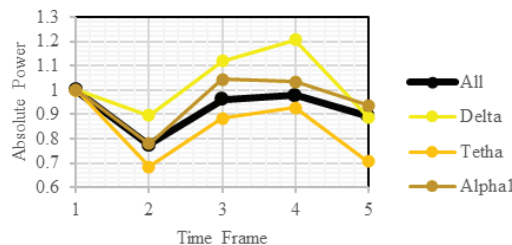


Figure 2: Normalized trend of changes relative to the absolute power of the total R1 segment, compared across the three low-frequency brainwave bands (Delta, Theta, and Alpha 1). 1: Rest 1; 2: Task 1; 3: Task 2; 4: Task 3; 5: Rest 2.

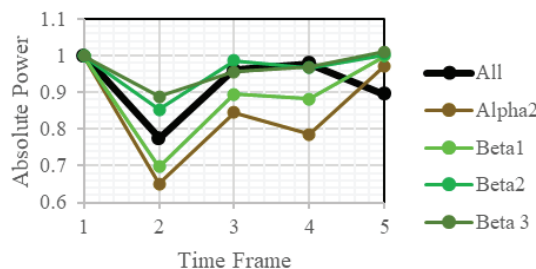


Figure 3. Normalized trend of changes relative to the absolute power of the total R1 segment across four mid-frequency brainwave bands (Alpha 2, Beta 1–3). 1: Rest 1; 2: Task 1; 3: Task 2; 4: Task 3; 5: Rest 2.

Figure 3 shows the normalized trend of changes relative to the absolute power of the total R1 segment across four mid-frequency brainwave bands (Alpha 2, Beta 1–3). As observed, the trend of changes up to the end of Task 3 closely follows the overall pattern of total absolute power. The absolute power values in Rest 2 tend to return to the level seen in Rest 1.

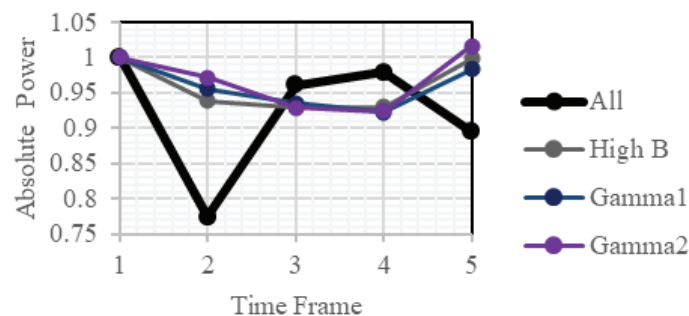


Figure 4 presents the normalized trend of changes relative to the absolute power of the total R1 segment across three high-frequency brainwave bands (High Beta, Gamma 1, and Gamma 2). In this range, except for Task 1, the trend of changes is opposite to that of the total absolute power. The absolute power values in all three bands in Rest 2 tend to return to the level observed in Rest 1.

Figure 4. Normalized trend of changes relative to the absolute power of the total R1 segment across three high-frequency brainwave bands (High Beta, Gamma 1, and Gamma 2). 1: Rest 1; 2: Task 1; 3: Task 2; 4: Task 3; 5: Rest 2.

Based on the obtained results, it can be concluded that for average absolute power, a similar pattern is observed across frequency ranges up to the high-frequency bands at the beginning of the task. This initial phase, identified as Task 1, showed a reduction in average absolute power ranging from 10% to 35%. However, in the high beta and gamma ranges (the highest-frequency waves), changes became apparent in the mid and final stages of the task, corresponding to Tasks 2 and 3.

Moreover, in 7 out of the 10 brainwave frequency bands, the contrast difference between Task 1 and Tasks 2 and 3 was statistically significant and clearly indicates a shift in the intensity of the Consciousness Field's influence over time. This may reflect the mental processing of information received from the Consciousness Field, subsequently altering brain activity.

This study provides evidence of the effects of the Faradarmani Consciousness Field on absolute

power, with a focus on brainwave activity. Further investigations will explore changes in relative power across different brainwave frequency bands under the influence of the Faradarmani Consciousness Field.

Acknowledgment

Authors would like to acknowledge the Iranian National Brain Mapping Laboratory (NBML), Tehran, Iran for providing data acquisition service for this research work.

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