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A Systematic Review of EEG Studies on the Neural Effects of Quran Listening

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Abstract

Objective: This systematic review aims to explore the effects of listening to the Quran on the electrophysiological aspects of the human brain, particularly focusing on how this auditory experience influences cognitive function, emotional well-being, and mental health.
Method: We conducted a comprehensive search across multiple databases, including Web of Science, PubMed, Scopus, and Google Scholar, using keywords such as "Quran" and "EEG." Studies included in this review were observational or clinical trials that investigated the effects of Quran listening on brain activity using EEG. Eligibility criteria were assessed according to predefined standards, with a focus on studies published in English. The Newcastle-Ottawa Scale was employed to evaluate the quality of the selected articles, and data extraction followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.
Results: A total of 236 studies were evaluated, leading to the inclusion of 22 eligible studies in this review. Findings indicate that listening to Quranic verses is associated with increased alpha and theta power, which correlates with relaxation and improved emotional states in participants, including non-Muslims. The review identified significant variations in study designs, methodologies, and quality, with many studies displaying a high risk of bias.
Conclusion: Listening to Quranic verses demonstrates potential therapeutic effects by activating brain regions associated with relaxation and emotional regulation. Despite promising findings, the current body of research is limited, particularly regarding nonlinear EEG dynamics and comprehensive study designs. Further neuroimaging and clinical investigations are warranted to validate these results and explore the therapeutic applications of Quranic listening in diverse contexts, such as pain management, psychological health, and rehabilitation.

Key words: *Brainwaves; Cognition; EEG; Neuroscience; Psychoacoustics; Spirituality*

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The intricate relationship between auditory stimuli and their impact on the human brain has garnered significant interest from researchers across various disciplines, including psychology, neuroscience, and spiritual studies (1). Among the diverse range of auditory experiences (2, 3), the recitation and listening to the Quran holds a unique position, particularly within Muslim communities. This sacred text, revered by millions, is not only a source of spiritual guidance, but also serves as a therapeutic modality that has been practiced for centuries (4). The current systematic review aims to explore the effects of listening to the Quran on the electrophysiological aspects of the human brain, shedding light on how this ancient practice may influence cognitive function, emotional well-being, and overall mental health.

The human brain is a complex organ that exhibits remarkable plasticity and responsiveness to external stimuli (5). Various forms of auditory stimuli, including music and spoken words, have been shown to affect neural activity, mood, and physiological responses (6). Research indicates that specific sound frequencies and patterns can evoke responses in the brain that relate to relaxation, concentration, and emotional release (7). Quranic recitation, characterized by its melodic and rhythmic qualities, is believed to produce a soothing effect that may facilitate a state of calm and mindfulness (8). This is particularly significant in today's fast-paced world, where stress and anxiety are prevalent (9). From a physiological perspective, the effects of auditory stimuli on brain activity can be measured using electroencephalography (EEG) and other neuroimaging techniques. These methods allow researchers to examine changes in brain wave patterns and electrical activity in response to listening experiences (10). EEG is a vital tool in cognitive neuroscience, providing real-time insights into the brain's electrical activity through the placement of electrodes on the scalp (11, 12). This non-invasive method allows researchers to monitor brain wave patterns and their correlations with cognitive processes such as attention, memory, and emotional responses (13). By capturing the dynamics of neural oscillations, EEG facilitates the exploration of how different brain states are associated with various mental tasks, making it invaluable for understanding the temporal aspects of cognitive functioning (14, 15). Studies have shown that specific frequencies and rhythms can lead to alterations in brain states, such as transitions from beta waves (associated with active thinking) to alpha waves (linked to relaxation and meditation) (16). By investigating the effects of Quranic listening, we can expand our understanding of how this spiritual practice may engage the brain and influence cognitive processes.

Several studies have reported psychological benefits associated with Quranic listening, including reduced levels of stress, anxiety, and depression (17). The soothing nature of the recitation is often cited as a contributing factor to these positive outcomes. These psychological effects may be accompanied by physiological changes observed through brain imaging studies, suggesting a connection between emotional well-being and neural functioning. Furthermore, the therapeutic potential of Quranic listening has led to its incorporation into various holistic health practices, especially in contexts where traditional medicine intersects with spiritual care (18). In the field of neuroscience, the concept of neurotheology has emerged, examining the relationship between religious experiences and brain activity (19). Early studies within this domain have suggested that spiritual practices, including prayer and meditation, can elicit distinct neural patterns that correlate with feelings of transcendence and connection (20). The principles of neurotheology can be further applied to the practice of listening to the Quran, providing an avenue to investigate how this specific auditory stimulus affects brain function and spiritual experiences.

The unique qualities of Quranic recitation are essential to understanding its potential effects on the brain. The rhythmic and melodic patterns inherent in the recitation can create an auditory environment that fosters focus and introspection (21). Additionally, the cultural and spiritual significance of the Quran may amplify its impact; individuals often engage with the text not only as a listening experience but as a profound form of meditation and contemplation. This multifaceted approach makes Quranic listening an intriguing subject for scientific exploration, especially regarding its electrophysiological effects (22).

Given the background of existing literature on the physiological effects of sound and music on the brain, it becomes crucial to systematically review studies that focus specifically on the effects of listening to the Quran. By consolidating research findings, we can gain insight into the electrophysiological changes that occur in the brain during and after Quranic recitation. It will also highlight the gaps in knowledge concerning how this unique auditory experience can be utilized for therapeutic purposes. One of the important scientific gaps in this field is the lack of a systematic review of brain signal analysis methods in studies that have evaluated the effect of listening to Quranic verses. For example, in two recent reviews, Ismail *et al*. (23) and Kannan *et al.* (8) discussed the neural correlates of listening to the verses of the Quran and their behavioral or psychological effects. Both of these studies have summarized and concluded the effects of listening to Quranic verses on the frequency spectrum of the EEG signal, but have not made any comments on the nonlinear dynamics of the EEG and the brain. This is despite the fact that many previous studies have shown that the nonlinear nature of EEG cannot be ignored in analyzing brain function (24, 25). Therefore, in this review, we try to investigate the effect of listening to

Quranic verses on the electrophysiology of the human brain with a new approach, focusing on various EEG analysis techniques and the nonlinear dynamics of the brain.

Materials and Methods

The search strategies utilized in this review follow the guidelines set forth by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (26). The eligibility criteria for including studies were determined by particular characteristics: observational or clinical trial studies that investigate the effects of listening to the Quran on the human brain using EEG. Exclusion criteria were non-English papers, review articles, case reports and book chapters, and lack of access to the full text of the article.

Search Strategy

Up to November 2024, we carried out a systematic review that spanned multiple databases, including Web of Science, PubMed, Scopus, and Google Scholar. The search strategy was meticulously crafted to be comprehensive, ensuring the inclusion of all relevant studies. We placed no restrictions on publication date or location during our search. The initial strategy was developed using MeSH terms and was then modified for use in the other databases. Our search included the keywords “Quran” and “EEG”. We also gathered additional relevant studies from the reference lists of the selected articles.

Study Selection

Two authors conducted an independent assessment of the studies identified through the literature search. They carefully evaluated each study against predefined eligibility criteria, analyzing the details presented in the titles and abstracts. This initial review allowed them to ascertain whether each study met the necessary inclusion criteria. In cases where there were uncertainties regarding the exclusion of a particular article, the authors collectively decided to obtain the full text for a more comprehensive evaluation. This process ensured that no relevant studies were overlooked and that all potential inclusions were thoroughly considered. For any articles that were not unequivocally rejected, a similar approach was taken. Additionally, when disagreements arose between the authors regarding the inclusion or exclusion of a study, they engaged in open discussions to reach a consensus decision, thereby maintaining the integrity and rigor of the review process.

Quality Assessment

To enhance the clarity of the findings and reduce potential bias in the review, two independent researchers assessed the validity and quality of the selected articles using the Newcastle-Ottawa Scale (NOS) (27). The NOS is commonly used for assessing the quality of non-randomized studies, particularly cohort and case-control studies. However, it can also be adapted for use with cross-sectional studies. The scale evaluates studies based on three broad categories: selection, comparability, and outcome. Therefore, our researchers examined multiple facets of each study, including the methodology, results, and discussion. The NOS features a rating scale that goes from 0 to 9 stars, where scores of 7 or above are deemed to indicate high quality, while scores below 7 are classified as low quality. Based on their evaluations, each article received an overall quality score, which played a crucial role in the synthesis of data and the overall understanding of the review's results.

Data Extraction

In accordance with PRISMA guidelines, two independent researchers carried out the data extraction process, collecting relevant information from each chosen study. This information encompassed aspects such as authors, publication date, study design, number of participants, average age, gender distribution, EEG recording protocol, analysis approach, EEG measures, main outcomes, and any additional pertinent details.

Results

Our search queries produced a total of six records in PubMed, 18 records in ISI, 27 records in Scopus, and 200 records in Google scholar. After removing 15 duplicates, 236 studies were totally evaluated against the inclusion criteria by examining their titles and abstracts, with the majority (200) being excluded based on these elements. A total of 36 studies were subjected to a more detailed evaluation because they satisfied initial inclusion requirements. Ultimately, 22 studies were found to meet the eligibility criteria and are included in this review (Figure 1). Detailed information about the studies can be found in Table 1. Regarding potential biases in the included articles, only two studies had a low risk of bias, while the other 20 studies had a high risk of bias due to lack of detailed study procedures and incomplete reporting of findings. In general, all studies show that listening to verses of the Quran leads to an increase in alpha and theta power, resulting in increased relaxation in subjects, even among non-Muslims.

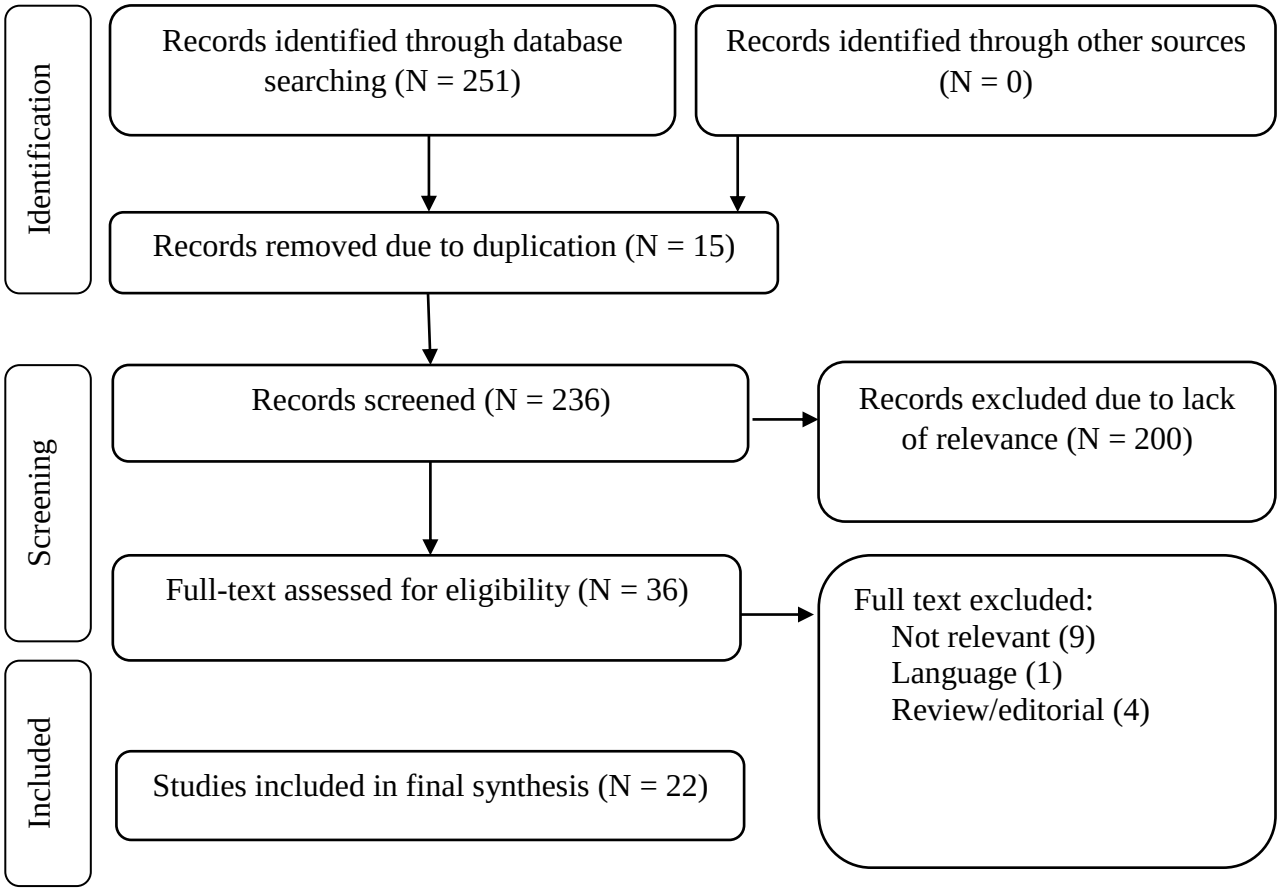

Figure 1. PRISMA Flowchart of Selected Studies on the Effects of Listening to the Quran on the Electrophysiology of the Human Brain

Table 1. Summary of Included Studies on the Neural Correlates of Quran Listening

Author (Year), Country	Subjects	EEG Electrodes	Non-Quranic Stimuli	Preprocessing Method	Analysis Technique	Main Outcomes	Quality
Abdullah and Omar (2011), Malaysia (28)	14 subjects	19 electrodes by 10-20	Hard music	Not reported	Spectral analysis	Increased alpha amplitude compared to beta wave, leading subjects to a relaxed condition	Low
Zulkurnaini et al. (2012), Malaysia (29)	28 healthy subjects	Not reported	Classical music	Not reported	Spectral analysis	Increased alpha amplitude when listening to the Quran compared to classical music	Low
Kamal et al. (2013), Malaysia (30)	10 healthy males (22-24 years)	19 electrodes by 10-20	Book reading	Low-pass IIR Butterworth filter	FFT	Increased alpha power during Quran listening compared to book reading	Low

Shekha et al. (2013), Iraq (31)	11 healthy subjects (20-24 years)	3 electrodes by 10-20	Soft and hard music	Not reported	Spectral analysis	Listening to Quran recitation can enhance the production of alpha waves, promoting a state of relaxation. This effect is more significant than that experienced while resting or listening to slow and heavy rock music.	Low
Alshaikhli et al. (2014), Malaysia (32)	3 healthy males (22-26 years)	4 electrodes (F3, F4, C3, C4) by 10-20	Hard music	Not reported	STFT	Increased alpha and gamma power when listening to Quran compared to music	Low
Vaghefi et al. (2015), Iran (33)	47 healthy subjects (28 males and 19 females, 21.4±2.7 years)	13 electrodes by 10-20	Arabic text	Band-pass filter and Notch filter	FFT	Increased theta and alpha power during Quran listening compared to Arabic text	High
Nasir and Mahmud (2016), Malaysia (34)	15 healthy subjects (22-25 years)	Not reported	Music	Band-pass filter	Spectral analysis	Increased alpha and beta power during Quran and music listening	Low
Rani et al. (2015), Malaysia (35)	6 healthy subjects (4 males and 2 females, 21-35 years, 3 Muslims and 3 non-Muslims)	61 electrodes by 10-20	Arabic text	Not reported	FFT	Rhythmic Quranic verse recitations elicit the theta responses compared to music	Low
Fauzan and Shahidan (2015), Malaysia (36)	10 healthy subjects (19-25 years)	19 electrodes by 10-20	Not applicable	Not reported	FFT	Engaging in reading and listening to the Quran activates the brain in distinct ways. Reading the Quran increases the amplitude of the highest spectral distribution more than merely listening to the verses. Nonetheless, both activities lead to the generation of delta waves.	Low
Al-Galal and Alshaikhli (2017), Malaysia (37)	25 healthy subjects (15 males and 10 females)	19 electrodes by 10-20	Music	Band-pass Butterworth filter	Spectral analysis	When listening to Quranic verses, the strength of alpha waves is greater than that of beta waves. In contrast, for music, the alpha and beta wave strengths are nearly the same	Low

Shab et al. (2017), Malaysia (38)	12 healthy subjects (21-35 years, 6 Muslims and 6 non-Muslims)	61 electrodes by 10-20	Arabic text	Low-pass and high-pass filters	FFT	The most significant theta activity was observed predominantly in the left frontal area	Low
Samhani et al. (2018), Malaysia (39)	28 healthy subjects (14 males and 14 females)	19 electrodes by 10-20	Arabic text	Not reported	FFT	Listening to verses from the Quran led to a reduction in alpha power in both the right inferior frontal and middle temporal regions	Low
Irfan et al. (2019), Pakistan (40)	22 healthy subjects (20-25 years)	2 electrodes	Soft music	Not reported	Spectral analysis	Quranic recitation produces higher amplitudes of alpha waves in comparison to beta waves	Low
Jalaudin and Amin (2019), Malaysia (41)	6 healthy subjects (5 Muslims and 1 non-Muslim, 20-24 years)	14 electrodes by 10-10	Music	Not reported	Spectral analysis	Increased alpha power was noted while listening to verses of the Quran	Low
Vaghefi et al. (2019), Iran (42)	47 healthy subjects (28 males and 19 females, 21.4±2.7 years)	13 electrodes by 10-20	Arabic text	Band-pass filter and Notch filter	Nonlinear analysis	Actively listening to the Quran reduces self-similarity and correlation of brain signals, while simultaneously enhancing the complexity and dynamism within the brain	High
Purnomo and Setiawan (2020), Indonesia (43)	5 healthy subjects (18-21 years)	5 electrodes by 10-20	Rest	Band-pass filter and ICA	Spectral analysis	An elevation in alpha wave activity suggests heightened focus and relaxation, potentially resulting in enhanced performance for drivers	Low
Fauzan et al. (2020), Malaysia (44)	3 healthy subjects (19-26 years)	19 electrodes by 10-20	Malay Language	Not reported	Spectral analysis	The average delta wave activity was greater during Quran listening compared to Malay language	Low
Halim et al. (2021), Malaysia (45)	10 healthy Muslims (2 males and 8 females, 20-30 years)	32 electrodes by 10-20	Music	ICA	Welch	Increased beta power was noted while listening to verses from the Quran	Low

Silabdi et al. (2021), Malaysia (46)	3 healthy subjects (25-32 years)	19 electrodes by 10-20	Rest	Not reported	Spectral analysis	As a result of exposure to Quranic recitations, the high Beta power associated with stress diminished, leading to a predominance of high Alpha power over Beta power. This shift indicates a return to a more balanced state of brain activity for the individual, free from stress	Low
Samhani et al. (2022), Malaysia (47)	28 healthy subjects (14 males and 14 females)	19 electrodes by 10-20	Arabic text	Band-pass filter	FFT	A significant reduction in beta power was found in the left occipital region while listening to Quranic verses	Low
Hosseini et al. (2022), Iran (48)	81 healthy subjects (26-40 years)	14 electrodes by 10-20	Rest	Not reported	Spectral analysis	Following exposure to the binaural beats of the Qur'an, 75% of the participants exhibited an increase in delta brain waves, while 88% experienced a rise in theta waves. Conversely, the remaining participants showed a decrease in these brain wave activities	Low
Syaifulloh et al. (2023), Indonesia (49)	4 healthy subjects (5-7 years)	2 electrodes by 10-20 (F7 and F8)	Not applicable	Band-pass filter and Z-score artifact free selection	FFT	Studying the Quran through techniques that incorporate visual, auditory, and memory-based activities led to an improved Frontal Alpha Asymmetry (FAA) index	Low

Auditory Stimuli

It is essential to clearly identify the specific verses and their significance when selecting them for a study. However, some research has inadequately mentioned the specific chapters or verses of the Quran that were investigated, which poses challenges for replicating their study design. The effects of Quranic recitations may vary significantly based on their meanings, the manner in which they are recited, and differences among reciters (50, 51). Therefore, this information must be thoroughly detailed in the methodology section. Comparisons made between listening to Quranic verses and other activities have typically been limited to specific experimental settings, such as reading books (30), listening to classical music (37, 52), and engaging with hard rock music (53). Only one study has compared the listening experience of Quranic verses with that of mantras (35). It is crucial to evaluate whether the stimuli used for comparison against Quranic verses appropriately address the research questions at hand.

Preprocessing Techniques

Recording EEG signals is a lengthy process, particularly when it involves some stimuli or performance of various tasks. During this recording, the EEG data can be tainted by unwanted signals, referred to as artifacts. Artifacts resulting from physical movements, eye blinks, heartbeats, and muscle contractions are termed physiological artifacts (54). Conversely, artifacts that arise from factors like environmental interference, electrode positioning, and equipment malfunctions are classified as non-physiological artifacts (55). These unwanted signals can compromise the integrity of the original EEG data, making it crucial to clean the data through preprocessing. In this phase, various algorithms are employed to filter out different types of artifacts,

ensuring the data is suitable for further analysis. As shown in Table 1, some studies used low-, high- or band-pass filtering, Notch filter of 50 Hz and independent component analysis (ICA) to mitigate the noise. Unfortunately, some articles also did not report the signal preprocessing technique.

EEG Analysis Technique

The examination of brainwaves in response to Quranic stimuli appears to focus on variations in the power spectral density (PSD) of different brainwaves in comparison to resting states or responses to alternative stimuli. The analytical techniques employed encompass Fast Fourier Transform (FFT) and Welch, with signal filtering applied based on the specific parameters of the study to assess the power of the brainwaves (56). However, studies in this area need to focus much more on the technical details of EEG analysis techniques. In the case of spectral analysis, the total duration of the signal under analysis, the EEG segmentation and epoch length, and the filters used to extract frequency bands are of great importance and can greatly influence the results. However, almost none of the included studies have paid attention to these technical points and have simply ignored them. Moreover, scientists can investigate source localization through techniques like low-resolution brain electromagnetic tomography (LORETA) to determine the origins of brain activity (57) and link them to specific cognitive functions. Utilizing high-density EEG is crucial for gathering brainwave data, as it allows for improved spatial sampling, facilitating rapid recording of brain activity and enhancing the precision of source localization (58). Consequently, employing EEG systems with a greater density of electrodes—ideally exceeding 32—is vital for effective analysis.

Nonlinear analytical techniques such as entropy and fractal analyzes (59) can provide deeper insights into brain activity while individuals listen to Quranic verses. These methods help quantify the complexity and variability of brain signals, revealing underlying patterns that might not be apparent through linear analysis alone. As the only study, Vaghefi *et al*. (60) explored the nonlinear dynamics of the brain by calculating some nonlinear EEG features including the Hurst exponent, sample and approximate entropy and detrended fluctuation analysis. In addition to these approaches, future research could utilize measures of functional connectivity, which examine the interdependence between different brain regions during the experience of Quranic recitation. This type of analysis can shed light on how various areas of the brain communicate and collaborate, enhancing our understanding of the neural networks involved in processing these auditory stimuli. Together, these methodologies present valuable avenues for exploring the intricate relationship between Quranic recitation and brain function, potentially uncovering key insights into cognitive and emotional responses elicited by sacred texts. Such interdisciplinary studies may contribute significantly to both neuroscience and spirituality research fields.

Discussion

This study revealed that the linguistic rhythms inherent in the sound of the Quran have a calming and strengthening effect on the human brain. These rhythms originate from the arrangement of the Quranic words and their individual letters. Additionally, the sound of the Quran features varying series of intensity, pitch, and periodicity, which significantly affect psychological and spiritual aspects of human experience. The brain responds to these rhythmic sounds through a phenomenon known as brainwave entrainment (61, 62). This process enhances neuroplasticity and induces event-related desynchronization, which is thought to enhance cognitive functions such as attention and memory (63). By exploring these connections, our research underscores the profound impact of Quranic recitation on mental processes and emotional well-being. For an extended time, it has been noted that listening to the acoustics of the Quran leads to specific physiological and psychological changes. We propose that the rhythmic qualities of these sounds influence cortical functions and corticofugal controls, potentially altering how information is processed at the levels of the brainstem and thalamus. This interaction may result in feelings of relaxation and calmness that can be observed at the cortical level. However, there is a scarcity of scientific data explaining the mechanisms through which the Quran affects human brain activity. In light of this, we are investigating various insights into these mechanisms. From a neuroscientific viewpoint, this study aims to identify several ways in which the sound of the Quran may help modulate human cognition.

Theta Waves

Theta brainwaves (4–8 Hz) are typically linked to the profound relaxation experienced by meditators and are associated with positive emotional states (64, 65). While alpha waves have been more extensively researched, theta waves have not received as much attention in studies examining the impact of listening to Quranic verses on the brain. Nonetheless, some research has indicated an increase in theta spectral power when individuals listen to these verses. Specifically, the rise in frontal-mental theta activity, which is believed to originate from the medial prefrontal cortex and may be localized in the anterior cingulate cortex, is considered a key indicator of meditation (66, 67). Enhanced theta power has been observed across various meditation techniques, such as focused attention meditation and transcendental meditation (68). Numerous studies suggest that theta power is associated with states of focused attention during meditation or cognitive tasks (69, 70). Therefore, the coexistence of theta and alpha waves is often regarded as a sign of effective executive functioning.

Alpha Waves

Alpha brainwaves are the primary signals often studied in relation to Quran recitation, as they are typically associated with relaxation and a state of mental inactivity (71). Research has shown that listening to Quranic verses can lead to an increase in alpha power compared to various music genres (28, 29, 32, 34). Additionally, reciting Quranic verses aloud has been found to enhance alpha power more than simply reading a passage from a novel (30). Alpha brainwaves are most prominent when individuals close their eyes and enter a relaxed state. It is commonly believed that the presence of alpha waves is linked to feelings of pleasure and relaxation (72). Furthermore, an increase in alpha activity is often identified as 'cortical idling,' which occurs when the brain is at rest, reflecting a deactivation of certain cortical areas (73). This results in a connection where higher alpha power corresponds to lower overall brain activity. Therefore, a decline in alpha power indicates heightened brain activity, and vice versa. Importantly, the rise in alpha waves and the resulting reduction in brain activity after Quranic recitation does not imply that the brain is inactive. Rather, it suggests that specific regions of the brain are less engaged in certain tasks, enabling other areas to focus on completing the task at hand. These findings highlight that listening to or reciting the Quran can foster relaxation and generate positive experiences.

Challenges and Future Directions

As the most important challenge, the quality of the studies reviewed was very low and the study design was sometimes poor. Future studies with appropriate design and bias-free implementation and reporting are needed to confirm the current findings. As another important challenge, the nonlinear dynamics and nonlinear characteristics of the EEG signal when listening to Quranic verses have been neglected. Given the nonlinear nature of the EEG signal, it is expected that future studies shall focus more on this important feature to shed light on new dimensions of the brain's response to the auditory stimulation of Quranic verses. In addition, almost all linear analysis methods have focused on spectral analysis and examination of the power of frequency bands, especially theta, alpha, and beta. However, very important features such as event-related potentials (ERPs) and even functional connectivity can provide us with much more information about the brain's response to a specific auditory stimulus. Therefore, future studies should focus on other analysis techniques and features of the EEG signal, especially nonlinear features and ERPs. Previous comparisons involving listening to or reciting Quranic verses were conducted within restricted experimental settings. Additional studies could examine the Quran in relation to other types of Arabic expression, including poetry and musical chants. Also, it is recommended that research be conducted on the long-term effects of listening to the Quran on cognitive abilities.

Limitation

Lack of access to sufficient data in original articles made it impossible to conduct meta-analysis in this study, which is one of our limitations. Many of the studies included in this review had small sample sizes, which can reduce the generalizability of the findings. Moreover, our review identified a narrow range of auditory stimuli used for comparative analyses, primarily focusing on Quranic recitation relative to music or text. This limited scope restricts insights into how Quranic listening stands in relation to other auditory experiences that may also affect brain function.

Conclusion

The understanding of the neural basis behind the effects of listening to Quranic verses is still in its early stages, as there has been limited research utilizing modern neuro-technological tools to explore the melodic aspects of the Quran in comparison to other meditation-based practices. Recently, some studies have begun to examine the neural mechanisms affected by listening to recited verses from the Holy Quran, specifically using EEG to analyze the resulting brainwave patterns. Current findings suggest that listening to these verses activates similar brain regions and produces therapeutic effects, such as inducing a relaxed cognitive and spiritual state, akin to those achieved through rhythmic music therapy. However, because research in this area remains scarce, further studies are needed with more precise and standardized methodologies to establish the validity and reliability of these findings. This review, along with emerging neuroimaging research, highlights the potential of listening to Quranic verses as a viable alternative tool within rhythmic therapy. There is a compelling need for additional neuroimaging and clinical studies to evaluate the potential effects of listening to Quranic verses across various contexts, including postoperative care, rehabilitation, pre- and postnatal care, pain management, and psychological health. It is exciting to consider that, in the near future, listening to rhythmic Quranic verses may be recognized as a legitimate mind-body therapeutic option that can complement or enhance traditional therapies.

Conflict of Interest

None.

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