Prayer in Persian Scientific Literature

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Abstract

This study examines trends in prayer within the Islamic World Science Citation Center (ISC) between 2000 and 2024 and identifies the subfields and key dimensions of the concept of prayer. This research used bibliometric techniques and co-word analysis. 429 documents were extracted from the ISC database to identify trends in prayer-related research. Cluster analysis and strategic diagrams were employed to map the conceptual structure of the studies and identify subfields and their relationships. The findings indicate the existence of nine clusters in this field: Linguistic and stylistic studies of transmitted prayers (1); Anthropology and semantics of prayer (2); Mysticism and the literature of dhikr (remembrance) and supplication (3); Theology and philosophy of prayer and its fulfillment (4); Prayer therapy and spiritual well-being (5); Theoretical and practical mysticism (6); Philosophy and Transcendent Theosophy of prayer (7); Psychology and logotherapy of prayer (8); and Quranic and comparative studies of prayer in religions (9). Analysis of the articles identified emerging topics in prayer. The results can provide a comprehensive understanding of current research areas and guide researchers in launching new studies in the emerging fields that this research introduces.

Keywords: Prayer, Dhikr and Supplication, Prayer therapy, Co-word analysis, ISC Citation Database.

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Introduction

The study of the concept of prayer across its various dimensions, ranging from semantics and linguistics to the psychology of religion and health, has attracted the attention of domestic and foreign researchers in recent decades. In religious literature, despite its apparent simplicity, prayer is one of the deepest mystical concepts. A review of Quranic verses and narrations shows that the very command of God Almighty and religious leaders regarding prayer is the best proof of its importance (Akbarnejad & Saki, 2011). From a semantic perspective, the word "prayer" in the jurisprudence of worship is semantically related to many terms, and the lack of attention to the systematic structure of this word's semantic field has been a shortcoming in previous studies (Mousavi & Mousavi, 2023). Levin (2008) defines prayer within a conceptual framework as internal communication or dialogue with a power recognized as God, demonstrating that praying and having positive attitudes toward religion are empirically related to personal well-being, health, and reduced psychological distress.

A review of the research literature shows that these studies can be organized into two major categories: research dealing with the conceptual, semantic, and structural dimensions of prayer, and research examining the psychological, health, and social functions of prayer. In the realm of health, many studies have shown that, in addition to promoting psychological well-being and reducing stress, prayer and supplication can improve physical health indicators through physiological mechanisms, such as lowering stress and strengthening the immune system (Badrlou, 2025). Furthermore, chronic illnesses such as cancer are highly stressful events, and prayer is considered a valuable coping strategy for Muslim patients (Rezaei et al., 2008). Research has also shown that teachers and educators, as one of the highly stressed groups in society, experience psychological distress at twice the rate of the general population, and prayer can be an effective coping strategy for them; a significant relationship between the frequency of prayer and job satisfaction has been documented (LaBarbera & Hetzel, 2016).

Domestically, researchers have mostly relied on Quranic, traditional (narrative), and jurisprudential texts to re-examine the concept of prayer and its semantic network. Semantic studies have shown that to arrive at the exact meaning of the word prayer, one must pay attention to the semantic network of its synonymous, antonymous, and associated words in the Quran (Karaminia et al., 2021). Stylistic studies have also shown that there is complete harmony and coherence between meaning and wording in the verses of prayer, and this harmony plays a significant role in conveying the themes and messages in the verses (Rezaei & Nasri, 2024). At the international level, a bibliometric analysis of research on Islamic spirituality has shown that topics such as welfare and well-being, clinical studies, and Islamic thought and civilization exhibit the highest keyword co-occurrence, and that emerging trends in this field have grown significantly in recent years (Zulkepeli et al., 2023). What is common to all these studies is the emphasis on the importance and centrality of prayer in human life, and on the necessity of a more accurate understanding of its conceptual structure.

Prayer, as one of the most central concepts in religious and spiritual thought, has long been the focus of scholars, jurists, and researchers in various fields. This concept holds an exalted position in Islamic texts and has been repeatedly emphasized in the Holy Quran and Islamic narrations (Akbarnejad & Saki, 2011). The word "prayer" in religious literature, despite its apparent simplicity, is one of the deepest mystical concepts, with semantic links to many words and an encompassing semantic field (Mousavi & Mousavi, 2023).

Given this multifaceted importance, the volume of published research on prayer has grown significantly in recent years. These studies have approached the subject of prayer from various angles; some with a semantic and linguistic approach (Karaminia et al., 2021), some with a stylistic and literary approach (Rezaei & Nasri, 2024), some focusing on psychology and health (Shahidi & Hasanlou, 2023; Badrlou, 2025), and others viewing this concept through jurisprudential and theological lenses (Mousavi & Mousavi, 2023). This diversity of approaches is, on one hand, a sign of the richness of this research area, and on the other, highlights the need for a comprehensive and systematic map of the conceptual structure of these studies.

Despite this volume of research, an important question remains unanswered: What is the conceptual structure of research on prayer within Persian literature? What are the central concepts and keywords of this field? Which topics have received more attention from Persian-speaking researchers, and which areas remain untouched? Answering these questions requires

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a systematic analysis capable of revealing the internal structure of this research field from a macro perspective. Bibliometrics and co-word analysis are among the efficient methods for this purpose and have also been applied to Islamic spirituality (Zulkepeli et al., 2023); however, no such study has been conducted on Persian texts, particularly in prayer-related research.

Without understanding the conceptual structure of a research field, any new study risks repeating previous studies, neglecting unknown angles, and lacking conceptual coherence with other research. Every study requires conceptualization to ensure the correct use of terminology, and the collection of studies in prayer also requires an understanding of keywords and their semantic relationships for proper semantic connections (Mousavi & Mousavi, 2023). Therefore, the current study aims to analyze the conceptual structure of research on prayer in Persian texts using bibliometric methods. It seeks to draw a comprehensive map of this research field, reveal relationships among core concepts and keywords, identify past research trends, and identify existing gaps to guide future studies. The achievements of this research can serve as a guide for researchers, educators, and students in this field, paving the way for more systematic and purposeful studies in the future. Below, the most important studies conducted in this field are presented, categorized into domestic and foreign studies.

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Literature Review

Co-word analysis has been used in many fields such as information literacy (Li et al., 2021), financial literacy (Sholehpour et al., 2023), digital literacy (Park et al., 2021), throbbing headaches (Rahimi et al., 2020), Iranian higher education studies (Rahimi et al., 2021), literacy (Rahimi et al., 2025), decision-making (Rahimi et al., 2024), and resistance economy (Rahimi & Soheili, 2025).

Akbarnejad and Saki (2011) showed that the word "prayer" in religious literature, despite its apparent simplicity, is one of the deepest mystical concepts. Their findings indicated that the beginning and type of requests in Quranic prayers vary and are not uniform. This study sought to articulate the subtle structural and content differences in Quranic prayers. Karaminia et al. (2021) first addressed the lexical semantics of prayer in terms of literal and linguistic meanings, then explored the semantic network of synonymous, antonymous, and associated words of prayer in the Quran, and finally analyzed the text and focal keywords of prayer in the Quran. Mousavi and Mousavi (2023), in a descriptive-analytical study using lexical and terminological texts, investigated the semantic relationship of the word prayer with other related words. The findings showed that a lack of attention to the systematic structure of the semantic field of the word prayer was a shortcoming of previous studies, and this word has semantic connections with many terms in the jurisprudence of worship.

Shahidi and Hasanlou (2023), in a qualitative study using semi-structured interviews with 20 graduates, professors, and researchers in the psychology of religion, described the process by which prayer impacts psychological peace. The findings identified 7 main components, including connection to divine power, generating hope, creating spiritual pleasure, increasing knowledge, boosting self-esteem, and identity formation, and extrapolated three main dimensions: transformation in personal states, transformation in beliefs and lifestyle, and transformation in self-belief. Rezaei and Nasri (2024) conducted a descriptive-analytical study examining foregrounding in prayer verses from a formalist perspective. The findings indicated

that phonetic, syntactic, and semantic deviations, as well as rule addition through repetition, were used in prayer verses. This study showed complete harmony and cohesion between meaning and words in prayer verses, and foregrounding in these verses enhanced their beauty.

Badrlou (2025), in a mixed-methods study, demonstrated that prayer and supplication, besides creating mental peace and reducing stress, also improve physical health indicators through physiological mechanisms, such as lowering stress hormones and strengthening the immune system. This study also showed that spirituality and religious attitudes play an effective role in reducing psychological disorders such as depression and anxiety. Masters and Spielmans (2007) reviewed empirical research on prayer and health in an article. Using meta-analysis, they examined the effects of distant intercessory prayer and concluded that no discernible effect was found. This study also reviewed the literature on the frequency of prayer, the content of prayer, and prayer as a coping strategy, and provided recommendations for future research. Levin (2008) relied on James' concept of prayer as internal communication or dialogue with a force recognized as God and, applying selected psychological constructs, theoretically explained how and why prayer helps reduce distress and improve psychological health. This study showed that praying and holding positive attitudes toward religion are empirically linked to personal well-being, health, and reduced distress.

Rezaei et al. (2008) found significant relationships between age, marital status, and education level with prayer activity, prayer experience, and attitude toward prayer, emphasizing the value of prayer as a coping strategy for Muslim cancer patients. Ap Siôn (2008) found that only 5% of prayers were for the individuals praying themselves; the majority were for family members and friends, and almost one-third of the requests pertained to physical and mental health issues. LaBarbera and Hetzel (2016) found a statistically significant relationship between prayer frequency and job satisfaction. This study also documented that the rate of psychological distress among educators is twice that of the general population. Zulkepeli et al. (2023) conducted a bibliometric analysis using Scopus data. Their findings showed that topics such as welfare and well-being, clinical studies, and Islamic thought and civilization had the highest keyword co-occurrence, and emerging trends in spirituality from an Islamic perspective were identified.

A review of the research literature reveals that the vast majority of existing studies on prayer have adopted thematic, qualitative, or empirical approaches, focusing heavily on its semantic dimensions, psychological impacts, and health outcomes. While these thematic studies highlight the richness and interdisciplinary nature of the field, there is a prominent lack of research dedicated to the structural analysis of the articles themselves. Although a few recent attempts, such as Zulkepeli et al. (2023), have utilized bibliometric methods to map international data, specific literature analyzing the conceptual architecture of Persian texts remains largely absent. Therefore, despite the thematic richness of previous works, there is a distinct methodological gap in systematically evaluating the bibliographic landscape of prayer research. The current study aims to fill this gap by shifting the focus from individual thematic findings to a macro-level bibliometric approach, utilizing co-word analysis to reveal the internal relationships among concepts and keywords in Persian prayer literature.

Methodology

This research used a bibliometric approach and co-word analysis. Research data were processed using VOSviewer, UCINET, and BibExcel software. The data for this study were

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extracted from the ISC database using the concepts of prayer, supplication, invocation, dhikr, fulfillment, answering, and prayers in the title field.

Initially, data were extracted from the database in Excel format. Then, through several coding stages, the required fields were extracted and saved as plain-text files. This text file was then imported into BibExcel. Using this software and its natural language processing techniques, key concepts were extracted based on the authors' keywords. The minimum frequency of occurrence for a term to be included in the bibliometric network was set to 3. The selection of this threshold is attributed to the inherent nature of literature in the humanities; in this domain, owing to lexical diversity, the breadth of abstract concepts, and the prevalent use of synonyms, the frequency distribution of keywords is more dispersed compared to the basic sciences. Consequently, adopting a threshold of 3 serves as an optimal point and, it effectively eliminates random terms, typographical errors, and insignificant words; So, it prevents the omission of lower-frequency key concepts, thereby preserving the richness of the conceptual network (Rahimi & Soheili, 2025). After completing the steps and issuing the commands in the software, a symmetric matrix was created in plain-text format. This matrix was then converted into a correlation matrix and saved in Excel format.

Next, the matrix was imported into VOSviewer. This software measures the strength of association between the remaining concepts that meet the defined threshold. The association strength between two concepts is a measure of their similarity, indicating the extent to which they co-occur in the sample records relative to other concepts (van Eck & Waltman, 2009a, 2009b).

The extracted data included 429 articles. Across these documents, the authors used 1,822 keywords. After extracting the keywords, concepts were unified and standardized. Following keyword standardization, 1,052 unique concepts remained. By applying the cut-off point, a 112x112 matrix was generated. The values of the matrix's diagonal cells would be zero. To map word co-occurrence, a K-means clustering analysis in VOSviewer was employed. Subject specialists and the weight of the concepts in the co-word network were used to name the clusters.

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Findings

Frequency Distribution of Prayer Field Concepts Based on Co-word Occurrence.

The frequency distribution of the most used concepts during the reviewed period is displayed in Table 1.

Table 1. The twenty most used concepts in the field of prayer by frequency.

No.	Concept	Freq.	No.	Concept	Freq.
1	Prayer	144	11	Fulfillment	11
2	Dhikr	38	12	Anxiety	10
3	Quran	37	13	Depression	9
4	Supplication	30	14	Bestowal/Gift	8
5	Invocation	27	15	Stylistics	8
6	Sahifa Sajjadiyya	16	16	Mulla Sadra	8
7	Rumi	12	17	Knowledge/Gnosis	8
8	Mysticism	12	18	Women	8
9	God	12	19	Ibn Arabi	8
10	Exegesis/Tafsir	11	20	Love	7

Table 1 displays the twenty most frequently used concepts in prayer research. The word 'prayer', with a frequency of 144, is the most central and frequent concept in this field. Following that, concepts such as Dhikr (38), Quran (37), and Supplication (30) rank next, illustrating the deep connection between prayer and Islamic sacred texts and related worship practices. The presence of concepts such as Invocation and Sahifa Sajjadiyya among the high-frequency terms indicates that Persian-speaking researchers have given special attention to transmitted prayers and narrative sources. Another notable point is the simultaneous presence of concepts from different fields, reflecting the multifaceted nature of research in this area. On the one hand, mystical and literary concepts such as Rumi, Mysticism, Ibn Arabi, and Love are present, indicating the literary and mystical approach of some studies. Concepts like Anxiety and Depression represent researchers' focus on the psychological and therapeutic functions of prayer. Furthermore, the presence of concepts such as Exegesis, Fulfillment, Gnosis, and Mulla Sadra indicates that research in this field encompasses theological, philosophical, and exegetical dimensions of prayer, alongside literary and psychological approaches. Overall, the frequency distribution pattern of the concepts provides a clear picture of the diversity of approaches and the thematic richness of prayer research in Persian texts.

Table 2 shows the concepts that co-occur most often. These concepts appeared simultaneously in at least two documents.

Table 2. Most frequent pairs of prayer keywords by frequency during the reviewed period.

Freq.	Co-occurrence Pair	Rank	Freq.	Co-occurrence Pair	Rank
1	Quran - Prayer	19	11	Predestination - Prayer	5
2	Prayer - Fulfillment	10	12	Prayer - Anxiety	5
3	Invocation - Prayer	9	13	Prayer - Exegesis	5
4	Mysticism - Dhikr	8	14	Quran - Dhikr	5
5	Mulla Sadra - Prayer	7	15	Supplication - Stylistics	5
6	Prayer - Fulfillment	7	16	Prayer - Depression	5
7	Prayer - Ibn Arabi	7	17	Lexical layer - Stylistics	5
8	Prayer - God	6	18	Supplication - Prayer	4
9	Rumi - Prayer	6	19	Prayer - Education	4
10	Culture - Prayer	6	20	Depression - Anxiety	4

Table 2 shows the co-occurrence pattern of word pairs in prayer research, reflecting the conceptual relationships and thematic network of this research field. A review of this table indicates that the most frequent co-occurrence is Quran-Prayer, with a frequency of 19, underscoring the centrality of the Holy Quran in this field's research and researchers' special attention to Quranic studies of prayer. Following that, the pairs Prayer-Fulfillment (10), Invocation-Prayer (9), and Mysticism-Dhikr (8) are in subsequent ranks, showing the

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conceptual link between prayer and theological discussions of fulfillment, similar worship concepts, and the field of Islamic Mysticism.

Another point worth considering in this table is the simultaneous presence of the pairs Prayer-Anxiety and Prayer-Depression, as well as the co-occurrence of Depression-Anxiety, indicating that researchers have studied the role of prayer in reducing psychological disorders. Additionally, the presence of pairs such as Prayer-God (6), Culture-Prayer (6), and Prayer-Education (4) indicates attention to the theological, cultural, and educational dimensions of prayer. Overall, the co-occurrence patterns in this table paint a multidimensional picture of the conceptual structure of prayer research.

Original Article

Clustering of Prayer Field Concepts Based on Cluster Analysis

To determine the number of clusters, the cluster analysis section of VOSviewer was used; the results are shown in Figure 1 and Table 3. As shown in the image, the concepts of prayer during the studied period are grouped into 9 clusters.

The results from Figure 1, show that the concepts fall into nine clusters: Linguistic and stylistic studies of transmitted prayers (1); Anthropology and semantics of prayer (2); Mysticism and the literature of dhikr and supplication (3); Theology and philosophy of prayer and its fulfillment (4); Prayer therapy and spiritual well-being (5); Theoretical and practical Mysticism (6); Philosophy and Transcendent Theosophy of prayer (7); Psychology and logotherapy of prayer (8); and Quranic and comparative studies of prayer in religions (9).

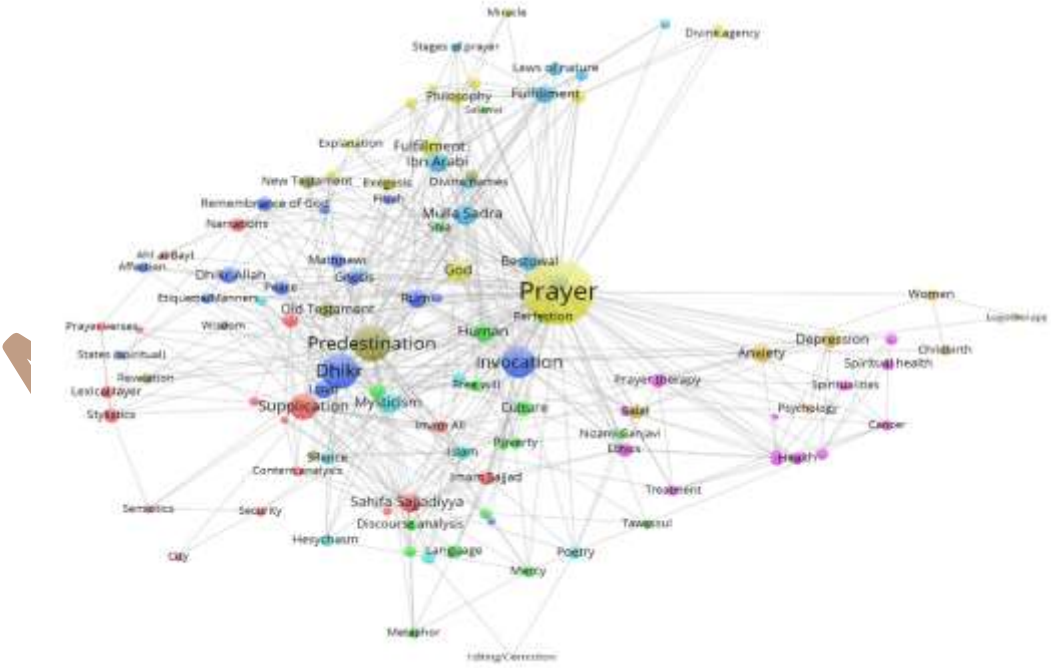

Figure 1. Co-word map of documents in prayer

Table 3 displays the cluster names, their important sub-branches, and the weight of each sub-branch.

Table 3. Names of clusters and sub-branches in prayer

Cluster No.	Cluster Name	Concepts	Weight	Cluster No.	Cluster Name	Concepts	Weight
1	Linguistic and stylistic studies of transmitted prayers	Supplication	88	2	Anthropology and semantics of prayer	Human	52
		Sahifa Sajjadiyya	52			Intellect	34
		Prayers	30			Culture	32
		Imam Sajjad	30			Language	26
		Stylistics	30			Free Will	22
		Narrations	24			Discourse Analysis	20
		Lexical layer	22			Perfection	20
		Imam Ali	20			Mercy	18
		Content analysis	14			Poverty	18
		Discourse	14			Semantics	18
		Security	12			Metaphor	16
		Ahl al-Bayt	10			Fear	16
		Prayer verses	10			Shia	16
		Misbah al-Mutahajjid	10			Nizami Ganjavi	16
		Intertextuality	8			Tawassul	14
		Semiotics	8			Narratology	12
		History	6			Salawat	6
3	Mysticism and literature of dhikr and supplication	Dhikr	160	4	Theology and philosophy of prayer and fulfillment	Prayer	538
		Invocation	124			God	68
		Rumi	46			Fulfillment	52
		Love	42			Exegesis	30
		Dhikr Allah	38			Allamah Tabatabai	26
		Worship	36			Philosophy	26
		Gnosis	30			Causal system	20
		Peace	28			Islamic mysticism	18
		Remembrance of God	28			Divine agency	14
		Mathnawi	26			Laws of nature	14
		Etiquette/Manners	16			Theology (Kalam)	14
		Affection/Love	16			Explanation	12
		Hadith	14			Answer to prayer	10
		Fitrah	12			Miracle	10
		Role	12				
		States	10				
		Shahnameh	8				
5	Prayer therapy and spiritual well-being	Prayer therapy	30	6	Theoretical and practical mysticism	Mysticism	56
		Ethics	26			Islam	28
		Health	22			Sufism	22
		Medicine	22			Suluk	22
		Patient	20			Poetry	22
		Spiritual health	18			Silence	20
		Hemodialysis	18			Hesychasm	18
		Treatment	16			Nafs	14
		Cancer	16			Imam Khomeini	10
		Spiritualities	16			Editing/Correction	4
		Illness	14				
		Adhkar	12				
		Iran	6				

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7	Philosophy and Transcendent Theosophy of prayer	Mulla Sadra Ibn Arabi Fulfillment Bestowal Predestination Fixed entities (Archetypes) Divine names Seeking Stages of prayer	60 56 46 40 26 20 18 12 12	8	Psychology and logotherapy of prayer	Anxiety Depression Salat Women Psychology Childbirth Logotherapy	46 38 28 18 14 12 6

Cluster No.	Cluster Name	Concepts	Weight
9	Quranic and comparative studies of prayer in religions	Quran Old Testament New Testament Education Revelation Judaism Wisdom	166 32 24 22 12 12 10

Table 3 shows the conceptual structure of research in prayer as nine distinct thematic clusters, each representing a specific approach or research area. The fourth cluster, titled "Theology and philosophy of prayer and its fulfillment," with a weight of 538 for the word prayer, is recognized as the central core of this research field and encompasses fundamental theological and philosophical discussions regarding prayer, its fulfillment, and the relationship between man and God. After that, the third cluster titled "Mysticism and the literature of dhikr and supplication" with high weights of 160 and 124 for dhikr and invocation, and the ninth cluster titled "Quranic and comparative studies of prayer in religions" with a weight of 166 for the Quran, stand out as two other highly frequent clusters, indicating the importance of mystical-literary approaches and Quran-centric studies in this field.

The thematic diversity of the clusters—ranging from linguistic and stylistic studies of transmitted prayers in cluster (1) and anthropology and semantics of prayer in cluster (2), to prayer therapy and spiritual well-being in cluster (5), psychology and logotherapy of prayer in cluster (8), as well as specialized clusters like philosophy and transcendent theosophy of prayer in cluster (7) and theoretical and practical Mysticism in cluster (6)—reflects the interdisciplinary nature of research in this area. It shows that the concept of prayer lies at the intersection of various sciences, including Quranic sciences, theology, philosophy, Mysticism, linguistics, literature, and psychology, and has been studied from diverse angles.

Accepted Article

The Structure of the Concept of Prayer Using a Strategic Diagram

After forming the matrix for each cluster and importing it into UCINET, the centrality and density scores for each cluster were determined, and the strategic diagram was drawn. It should be noted that the diagram was set to 6.22 and 0.615 based on the average centrality and density of the clusters, respectively. The density and centrality scores for the clusters are displayed in Table 4.

Table 4. Density and centrality of clusters resulting from co-word analysis in prayer

Cluster No.	Cluster Name	Density	Centrality
1	Linguistic and stylistic studies of transmitted prayers	0.346	5.889
2	Anthropology and semantics of prayer	0.257	4.118

3	Mysticism and literature of dhikr and supplication	0.529	8.471
4	Theology and philosophy of prayer and fulfillment	0.791	10.286
5	Prayer therapy and spiritual well-being	0.410	4.923
6	Theoretical and practical mysticism	0.467	4.200
7	Philosophy and Transcendent Theosophy of prayer	0.833	6.667
8	Psychology and logotherapy of prayer	0.952	5.714
9	Quranic and comparative studies of prayer in religions	0.952	5.714

Cluster 4, with a value of 10.286, has the highest centrality, and clusters 8 and 9, with a value of 0.952, have the highest density. This indicates a strong connection within the co-occurrence network of concepts in these clusters, and that cluster 4 has the greatest centrality in terms of influence and connections with other topics. In contrast, clusters 8 and 9 have greater internal linkage capability than the other clusters.

The strategic diagram describes the internal connections and correlations between different thematic clusters. In this diagram, the horizontal axis typically represents centrality (the degree of correlation between clusters), and the vertical axis represents density (the strength of internal connections within each cluster) (Wu et al., 2013). Melcer et al. (2015) introduced the strategic diagram to better visualize and display the maturity and cohesion of thematic clusters within a research field.

As seen in Diagram 1, the strategic diagram is divided into four sections, each forming a quadrant. Clusters in the first quadrant are cohesive and central to the research field. These main clusters focus on much of the network. Clusters in the second quadrant are still cohesive but are no longer central, each representing smaller, specialized sections of the research field. In the third quadrant, the clusters decline; these are emerging or declining sections of the network. Finally, the fourth quadrant contains clusters that have not yet reached maturity but have the potential to become core sections (Melcer et al., 2015; Khasseh et al., 2017).

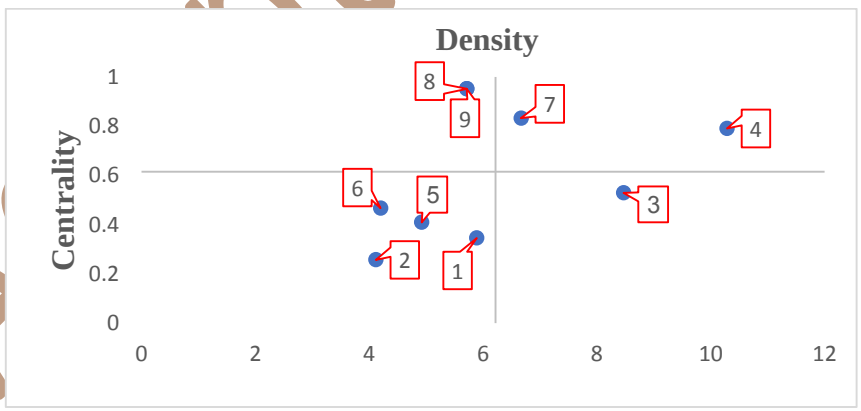

Diagram 1. Strategic Diagram of the Prayer Field

Based on the strategic diagram, the first quadrant contains Theology and philosophy of prayer and its fulfillment (4) and Philosophy and Transcendent Theosophy of prayer (7), which are the main thematic clusters of this field. These clusters are cohesive, central to the research area, and focus on a large segment of the network. The clusters Psychology and logotherapy of prayer (8) and Quranic and comparative studies of prayer in religions (9) in the second quadrant of the diagram rank lower in terms of importance and influence in the research field than the first-quadrant clusters. These clusters remain cohesive but lack centrality, representing smaller, specialized sectors of the research field. The clusters Linguistic and stylistic studies of

transmitted prayers (1), Anthropology and semantics of prayer (2), Prayer therapy and spiritual well-being (5), and Theoretical and practical Mysticism (6) are emerging or declining parts of the network. The fourth quadrant displays clusters that have not yet matured but hold the potential to become core sectors; in this study, Mysticism and the literature of dhikr and supplication (3) fall into this quadrant.

Conclusion

Based on the data presented in Tables 3 and 4, as well as the theoretical foundations of the strategic diagram, the first quadrant of the diagram is the location for clusters that are both internally cohesive (high density) and highly central (strongly connected to other topics). These clusters are recognized as the core and foundational themes of the research field, encompassing much of the conceptual network and constituting the backbone of this scientific domain.

Considering the origin of the diagram (centrality 6.22 and density 0.615), in this study, two clusters, theology and philosophy of prayer and its fulfillment (4) and Philosophy and Transcendent Theosophy of prayer (7), fall into the first quadrant. Cluster 4, with a centrality of 10.286 (the highest among all clusters) and a density of 0.791 (above average), occupies a prominent position. The high centrality indicates that this cluster has the most influence and connection with other topics in the prayer domain. In contrast, the high density signifies a strong internal relationship among the concepts within this cluster. According to Table 3, the central and heavily weighted concept of this cluster is the word "prayer" itself, with an impressive weight of 538. Other important concepts include God, Fulfillment, Exegesis, Allamah Tabatabai, and Philosophy. This shows that in Persian scientific texts, theological, philosophical, and exegetical discussions of prayer and the "why and how" of its fulfillment constitute the central core and primary concern of researchers. Studies have focused on humanity's relationship with God through prayer and its philosophical and theological explanations.

The Philosophy and Transcendent Theosophy of prayer (7) cluster, with a centrality of 6.667 and a density of 0.833 (above average and close to the highest density), indicates high internal maturity and cohesion. The heavily weighted concepts of this cluster include Mulla Sadra, Ibn Arabi, Fulfillment, Bestowal, Predestination, Fixed entities, and Divine names. The prominent presence of Mulla Sadra's school of Transcendent Theosophy and Ibn Arabi's theoretical Mysticism, alongside concepts such as predestination, bestowal, and fixed entities, suggests that one of the main pillars of Persian research on prayer is its examination from the perspectives of Islamic philosophy and Mysticism. Researchers have sought to explain the place of prayer within philosophical and mystical systems—i.e., how prayer affects the universe, its relationship to divine predestination, etc.

In this study, the theology and philosophy of prayer and its fulfillment (4) and Philosophy and Transcendent Theosophy of prayer (7) are two dominant, mature, and structuring themes. This means that any systematic research or review of prayer inevitably intersects with these two core hubs. Researchers in this field have dedicated their greatest academic weight and conceptual focus to investigating the philosophical, theological, exegetical, and theosophical foundations of prayer, emphasizing the views of thinkers like Allamah Tabatabai, Mulla Sadra,

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and Ibn Arabi, and it is these concepts that guide and control the co-occurrence network of this scientific domain.

The second quadrant of the strategic diagram is typically the site of cohesive clusters that are recognized as specialized and developed sections. In the current study, the clusters Psychology and logotherapy of prayer (8) and Quranic and comparative studies of prayer in religions (9) fall into this quadrant. As Table 4 indicates, these clusters possess the highest density in the network (0.952), making them highly mature, internally cohesive, and specialized areas. This high density shows that each of these fields has established a deep connection with its own concepts; for instance, in the eighth cluster, concepts like anxiety, depression, ritual prayer (salat), and logotherapy, and in the ninth cluster, concepts such as the Quran, Old Testament, New Testament, and education carry significant weight. Therefore, it can be concluded that clinical-psychological approaches to prayer and their comparative study across divine religions have reached internal maturity in Persian scientific literature. However, it is crucial to note that although they are placed in the second quadrant, their centrality score (5.714) is very close to the network's average (6.22). Therefore, rather than lacking centrality or being isolated, these clusters operate on the borderline of the first and second quadrants. They represent highly specialized sectors that, while maintaining a strong internal focus, still possess a moderate and meaningful connection with the core network.

The third quadrant of the strategic diagram hosts clusters that are low in both density and centrality, making them known as emerging (or declining) sectors. In this research, the clusters Linguistic and stylistic studies of transmitted prayers (1), Anthropology and semantics of prayer (2), Prayer therapy and spiritual well-being (5), and Theoretical and practical Mysticism (6) are in this quadrant. Based on the data, the centrality of these clusters ranges from 4.118 to 5.889, and their density ranges from 0.257 to 0.467, both of which fall below the diagram's origin averages. This situation indicates that the topics in these clusters have not yet found a cohesive structure within the prayer research network and lack strong ties to the central core. These clusters may represent nascent trends capable of future growth and development; currently, their impact on the main body of knowledge in this area is assessed as very minimal.

The fourth quadrant of the strategic diagram encompasses clusters that have not yet reached full maturity and cohesion but, because of their high centrality, hold high potential and capacity to become core, central topics in the future. In this study, the Mysticism and literature of dhikr and supplication (3) cluster is positioned in this quadrant. Statistically, this cluster's above-average centrality of 8.471 shows strong links with other domains of the network—especially the central core (theology and philosophy of prayer and its fulfillment)—placing it in the mainstream of discussions. However, its below-average density of 0.529 indicates that the internal concepts of this cluster have not yet formed a unified, cohesive structure. A review of Table 3 corroborates this: the heavily weighted concepts in this cluster, such as dhikr (160), invocation (124), Rumi, love, and peace, showcase the intersection of Mysticism with Persian literature. These conditions indicate that the literary-mystical approach to prayer—focusing on the works of literati and mystics such as Rumi and examining concepts like dhikr and invocation—is an emerging field in Persian scientific literature. Although researchers have addressed these topics in a scattered manner without building deep internal connections so far, because of their broad connection with other key concepts in prayer, it is expected that with the formulation of more comprehensive theories and the execution of focused studies in the

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future, this cluster will mature and secure its place in the first quadrant alongside the main, cohesive themes.

The conceptual structure of the field of prayer in Persian scientific texts primarily rests on two central pillars: Theology and the philosophy of prayer and its fulfillment, and Philosophy and the Transcendent Theosophy of prayer, which are identified as the mature, cohesive, and influential cores of the network. Around this core, specialized approaches such as Psychology and logotherapy of prayer and Quranic and comparative studies of prayer in religions, possessing high internal cohesion but lower influence, have developed in the second quadrant. Concurrently, areas such as linguistic studies, anthropology, prayer therapy, and theoretical and practical Mysticism are emerging trends in the third quadrant and are evaluated as structurally weak. Meanwhile, Mysticism and the literature of dhikr and supplication, with high centrality but lower density in the fourth quadrant, stand out as a high-potential, nascent field poised to become a central part of the network in the future. Persian studies have so far heavily leaned on the explanatory, philosophical, and theological dimensions of prayer, while interdisciplinary, practical, and literary approaches to this field remain on a path of structural evolution and consolidation.

Research Recommendations

Given the placement of the Mysticism and literature of dhikr and supplication cluster in the fourth quadrant (high centrality and low density), it is recommended that systematic studies be conducted to build internal cohesion within this area.

Despite its high density, the Psychology and logotherapy of prayer cluster has relatively low centrality. Interdisciplinary research examines the impact of theological and philosophical variables—such as belief in the fulfillment of prayer, reliance on God (Tawakkul), and predestination—on logotherapy processes and on the reduction of anxiety and depression, to strengthen the bond between this specialized field and the core network.

The Quranic and comparative studies of prayer in religious clusters, characterized by high density and low centrality, possess substantial potential for deeper comparative research. It is recommended that studies be conducted comparing the philosophy, conditions, and etiquette of answered prayers in the Quran, the Old Testament, and the New Testament, and that the impact of these theological differences on the religious upbringing and spiritual health of various societies be examined.

Regarding the third-quadrant clusters, it is recommended to conduct stylistic and linguistic research to discover the linguistic patterns of transmitted prayers; anthropological studies concerning the role of prayer in diverse Iranian-Islamic cultures; clinical reviews of prayer therapy to measure the effect of prayer on spiritual and physical health; and a systematic analysis of theoretical Mysticism in relation to prayer.

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