



Correlation between Meditation and Buddhism: Bibliometric Analysis

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ABSTRACT

Meditation and Buddhism are two concepts that are often closely related in the context of spiritual pursuit and self-development. Meditation and Buddhism have a close relationship with each other. Therefore, this study aims to carry out a bibliometric analysis of the relationship between Creationism and Buddhism. By using bibliometric analysis methods, this research will reveal trends, research focus, and researcher collaboration in this research. Data will be analyzed from academic sources, scientific journals, and related literature to provide a holistic picture of the research contribution to understanding the relationship between transmission and Buddhist teachings. Google Scholar database was used for data search. Apart from that, Publish or Perish 8 and VOSviewer applications are also used in research to make data searching and data analysis easier. The research results showed that this topic was widely researched in 2020 and meditation was also considered as a way to overcome mental health problems such as stress and depression. It is hoped that the results of this research will provide in-depth insight regarding the development and direction of research in the field of meditation and Buddhism, as well as make a positive contribution to the practice of meditation and understanding Buddhist teachings in the context of mental well-being.

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1. INTRODUCTION

Meditation and Buddhism are two concepts that are often closely related in the context of spiritual pursuit and self-development. Meditation, an ancient practice that embraces silence and reflection (Kirmayer, 2015), has taken center stage in many aspects of modern life. Meanwhile, Buddhism, a religion and philosophy originating from the teachings of Siddhartha Gautama (Black, 2017), emphasizes a deep understanding of reality and liberation from suffering (Emmanuel, 2012). These two concepts have a complex relationship and have been the focus of significant research in the scientific literature.

The complex relationship between meditation and Buddhism includes that meditation has strong roots in Buddhism, and the practice of meditation is often considered one of the main aspects of the Buddhist spiritual path. Meditation in Buddhist teachings is usually done as a concentration of the mind to obtain calm in reaching the highest level (Nibbana) (Dockthaisong, 2018). Apart from that, in Buddhism meditation is divided into two types, namely Samatha Bhavana (inner calm) and Vipassana Bhavana (insight) (Dhiman, 2008).

Bibliometric analysis has become an effective method for understanding research developments in various fields of science, including the study of meditation and Buddhism. Through bibliometric studies, we can identify research trends, current thinking, and conceptual frameworks that form the basis of these studies (Ogut et al., 2023). Bibliometric analysis is commonly used in scientific disciplines and focuses on the quantitative study of journal papers, books, or other types of written communication (Spiegel-Rosing, 1977; Gaviria-Marin et al., 2018). As previously explained, bibliometric analysis has 4 benefits, namely analyzing trends in individual research or fields of study, providing evidence for the impact of individual research or fields of study, discovering new and emerging research fields, identifying potential research collaborators, and identifying sources that are suitable for publication.

Research using the bibliometric analysis method has been carried out by many previous researchers, including research conducted by Al Husaeni and Al Husaeni (2022) who examined publication trends on science and Islam topics, research conducted by Al Husaeni and Munir (2023) who examined regarding the philosophy of science and technology education, research conducted by Al Husaeni (2022) which examined the trend of briquette research during the Covid-19 pandemic, research conducted by Al Husaeni and Rahmat (2023) which examined the influence of digital transformation on improving the quality of learning Islam, and research conducted by Nandiyanto et al. (2021) which examines publication trends in chemical engineering research topics.

Seeing the large number of studies that use bibliometric analysis methods, this research was carried out. This research aims to carry out an in-depth bibliometric analysis of the correlation between meditation and Buddhism, to reveal research developments as well as conceptual trends emerging in the scientific literature.

In this research, many scientific publications covering key aspects of meditation and Buddhism, such as the influence of meditation on Buddhist practice, the development of thought in the context of these two concepts, as well as the impact of meditation on the psychological and physical aspects of individuals will be investigated. Using a bibliometric approach, this research will provide a comprehensive picture of the extent to which these studies have come to the fore, the extent to which research developments have achieved a deeper understanding of the correlation between meditation and Buddhism, and potential future research directions in this area.

Through a better understanding of related scientific literature, it is hoped that this research can contribute to the development of scientific insight into how meditation and Buddhism are interconnected, enriching the understanding of the spiritual and philosophical principles inherent in both.

2. METHOD

A literature review of previous research regarding the relationship between meditation and Buddhism was carried out in this research. Theoretical and bibliometric analysis methods were used in this research. There are five stages in this research, namely (i) determining the study topic, (ii) collecting publication data, (iii) processing article text and bibliometric data, (iv) visualization of bibliometric data mapping, and (v) analysis of bibliometric data visualization results. More complete research steps using bibliometric analysis can be seen in **Figure 1**.

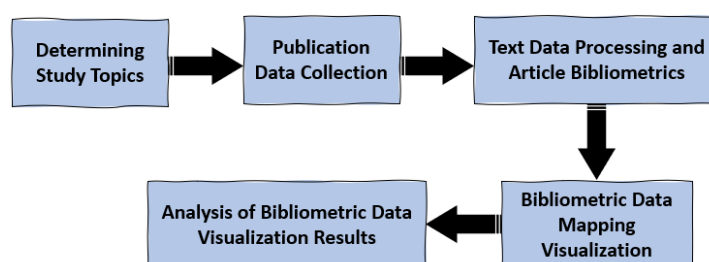


Figure 1. Bibliometric analysis research steps.

The Google Scholar database is used to collect article data which will later be analyzed. Using the Google Scholar database is considered easier compared to other databases because the Google Scholar database is more general without any limitations. Mapping visualization is produced through computational processing in the VOSviewer application. Detailed information regarding how to install and how to use VOSviewer as well as the step-by-step process for processing bibliometric data is explained in previous research conducted by [Al Husaeni & Nandiyanto \(2022\)](#).

The keywords used to search for article data are "Meditation" AND "Buddhism". Data searches were limited to articles of the journal type and in English. We determined the research year limit, namely from 2019-2023 (the last 5 years). Meanwhile, the search process using the Publish or Perish 8 application results in a maximum number of articles found being limited to 1000 articles. From the results of article data collection using the Publish or Perish 8 application, 920 articles were obtained.

Two forms of visualization are used in this research, namely network visualization and overlay visualization. These two visualizations are used to illustrate the relationship between terms. Data mapping based on text data found 5074 terms. The terms found were selected again based on the number of occurrences of at least 10 times. Thus, the keyword terms found were 111 terms. After that, a minimum relevance of 60% was selected for retrieval of each term. The final stage is term filtering. The results of the filtering show that the number of terms used in the mapping analysis is 67 terms.

3. RESULTS AND DISCUSSION

3.1. Bibliometric Analysis of the Relationship between Meditation and Buddhism

The development of the growth of publications related to meditation and Buddhism is presented in **Figure 2** which is summarized from 2019-2023. Based on **Figure 2**, the number

of publications on related topics decreased quite significantly from 2020-2023 and increased in 2019-2020. In 2019 the number of publications regarding meditation and Buddhism was 238 publications, in 2020 there were 244 publications, in 2021 there were 197 publications, in 2022 there were 169 publications, and in 2023 there were 92 publications.

In addition, based on **Figure 2**, the highest growth in publications on related topics was in 2020, reaching 244 publications. Developments in 2020 could be caused by increasing public interest in mental and spiritual well-being, especially during a global situation full of uncertainty and stress, such as the COVID-19 pandemic. Meditation, which is an integral part of Buddhist teachings, has attracted the attention of researchers because it is thought to provide significant benefits in managing stress, anxiety, and depression. In the context of the pandemic, economic uncertainty, social isolation, and mental health crises have come into focus, prompting researchers to explore the potential of Buddhist meditation as a means to improve psychological well-being. It is hoped that the results of this research will provide valuable insight for mental health practitioners, the general public, and related parties to develop more holistic strategies for maintaining mental health amidst global challenges such as the pandemic.

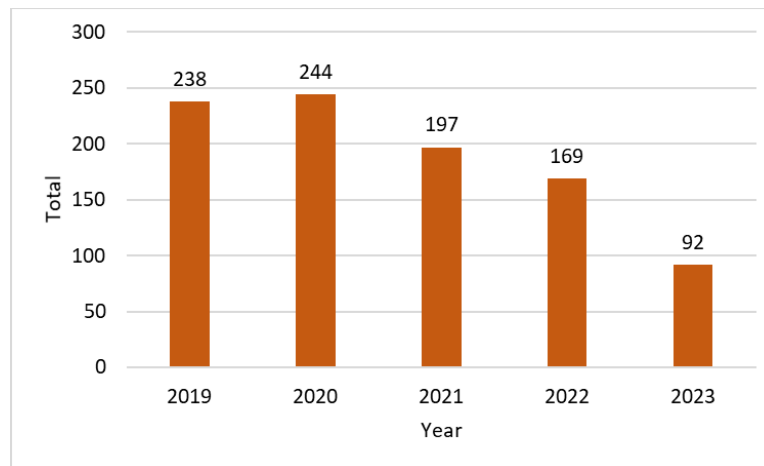


Figure 2. Development of publications per year.

Apart from presenting trends in publication development per year, bibliometric analysis also provides information about authors and the number of citations for each article that has been published by the 10 researchers with the most citations. The article entitled "wherever you go, there you are: mindfulness meditation in everyday life" which was published in 2023 received the highest citations, namely 10633 citations. The second article that received the most citations was an article written by Suzuki, S. entitled "zen mind, beginner's mind" with a total of 2731 citations and published in 2020. Meanwhile, in third place with 1204 citations was an article written by Gombrich, R. and Obeyesekere, G. with the title "Buddhism transformed: religious change in Sri Lanka". In full, the top 10 citations in related research are summarized in **Table 1**. Based on data from the 10 articles with the most citations, it can be seen that the highest number of citations is 10633 and the least is 320 citations. The average citations for the top 10 articles amounted to 1865.1 citations per article.

Figure 3 and **Figure 4** show the form of visualization using the VOSviewer application. **Figure 3** shows the visualization network, while **Figure 4** shows the visualization network. In **Figure 3**, the development map of research publications on the topic of "meditation" and "Buddhism" forms 5 clusters that have different numbers of items and colors. Cluster 1, marked in red, consists of the main fields of science (indicated by the large circle in cluster 1), namely effect and mind. Cluster 2, marked in green, consists of the main fields of knowledge

(indicated by the large circle in cluster 2), namely Path and early Buddhism. Cluster 3, marked in blue, consists of the main fields of science (indicated by the large circle in cluster 3), namely China and Zen. Cluster 4, marked in yellow, consists of book, contemplation, importance, one, Thailand, Theravada Buddhism, west, and world. Cluster 5, marked in purple, has a total of 8 items, consisting of application, Japan, Tibetan Buddhism, vipassana, zazen, Zen, Zen Buddhism, and Zen meditation.

In **Figure 4**, the novelty of the discussion of research topics discovered based on analysis using the VOSviewer application is depicted. Discussion of related topics, namely meditation and Buddhism, are widely used as research topics in 2020.

Table 1. Ten authors with the highest number of citations on the research topic of religion and Buddhism.

Cites	Authors	Title	Year
10633	J Kabat-Zinn	Wherever you go, there you are: Mindfulness meditation in everyday life	2023
2731	S Suzuki	Zen mind, beginner's mind	2020
1204	R Gombrich, G Obeyesekere	Buddhism transformed: religious change in Sri Lanka	2021
1082	DT Suzuki	Essays in zen Buddhism	2023
894	R Fields, B Bogin	How the swans came to the lake: A narrative history of Buddhism in America	2022
541	M Shaw	Passionate enlightenment: Women in tantric Buddhism	2022
459	S Batchelor	The awakening of the West: The encounter of Buddhism and Western culture	2021
404	T Brook	Praying for power: Buddhism and the formation of gentry society in late-Ming China	2020
383	B Buddhaghosa	The path of purification: Visuddhimagga	2020
320	E Braun	The birth of insight: Meditation, modern Buddhism, and the Burmese monk Ledi Sayadaw	2019

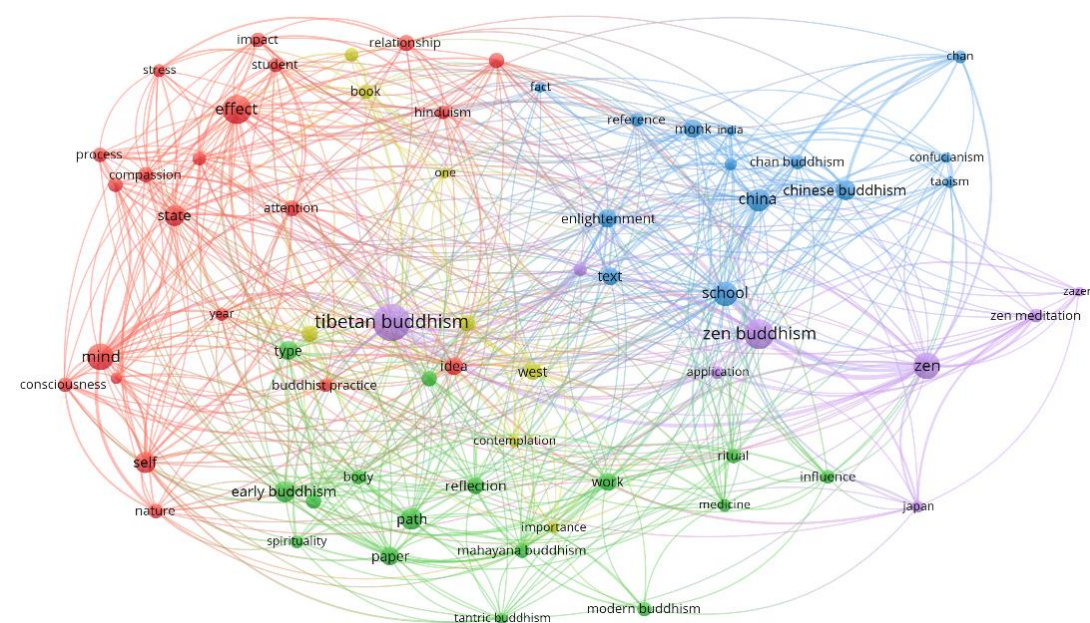


Figure 3. Network visualization

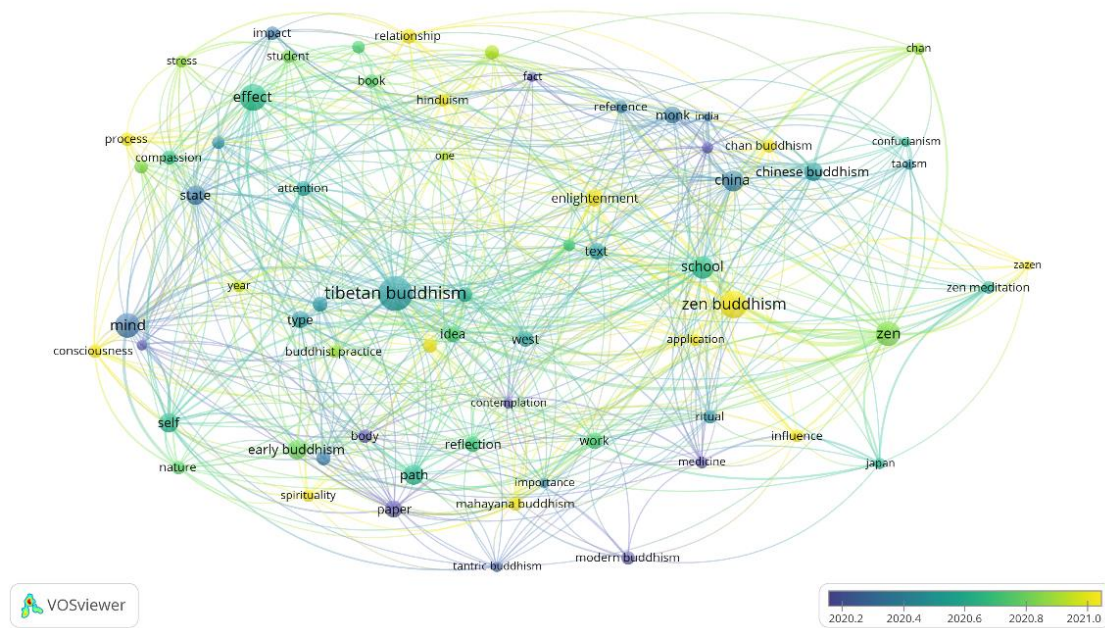


Figure 4. Overlay visualization

3.2. The Concept of Meditation in Buddhist Teachings

Meditation is a form of exercise to focus and clear your mind, so you can feel calmer, more comfortable, and productive (Jain et al., 2007). This practice is generally done by sitting quietly, closing your eyes, and breathing slowly and regularly, for at least 10–20 minutes (Kornfield, 1979).

In Buddhist teachings, meditation in Pali is called bhavana, which means development. Terminologically, meditation is inner development in carrying out cleansing (Patel, 2013). Meditation is a Buddhist teaching as focusing the mind to obtain calm in reaching the highest level (Nibbana) (Rahmani & Busro, 2023). Meditation is divided into two types, namely Samatha Bhavana (inner calm) and Vipassana Bhavana (insight).

- (i) Samatha Bhavana (inner calm) means inner calm, especially when the mind is focused and focused on an object (Rahmani & Busro, 2023). Thus, the mind doesn't think about anything else. By practicing samatha bhavana, mental obstacles cannot be completely removed. Samatha Bhavana can only reach the levels of concentration called Jhanas and attain inner power.
- (ii) Vipassana Bhavana (insight) is the path to eliminating all mental impurities culminating in Nirvana or the end of suffering. To eliminate greed, hatred, and ignorance, calmness and insight must be used. Insight meditation requires a foundation of inner calm, the result of meditation developing calm.

Meditation aims to see the essence of oneself until we finally realize that everything is impermanent, thus helping to develop the right view. Meditation has various benefits starting from health, inner calm, clear thinking, enthusiasm for worship, and so on. Therefore, meditation has a great influence on the spirituality of Buddhists.

3.3. Buddhist Concept

Buddhism has a concept of belief that may be slightly different from the concept of belief in other religions. The term saddha can be equated with the word faith in general (Galadari, 2020). But conceptually, saddha is a form of belief in Buddhist teachings, which begins with inquiry/research or "come and see" (ehipassiko) so that it will not give rise to blind faith (Dyck

& Purser, 2019). As Buddha preached in the Alagaddupama Sutta, someone who has studied the Dhamma must examine the meaning of the teachings with wisdom, to gain true understanding.

Belief in Buddhism is belief in Tiratana or three gems, namely Buddha, Dhamma, and Sangha (Bhikkhu, 2000). Buddha is likened to someone who has never seen the depth and breadth of the ocean, but only needs to see how many rivers flow there (Shin'ya, 2021). If the ocean is not a deep and wide ocean, many rivers can't flow there. This means that to prove the Buddha as an incomparable teacher for gods and humans (satthā devamanussanaṃ) is to see how many of his disciples have achieved perfection. Likewise, seeing the truth of the Dhamma is by implementing Buddha's teachings, and following the rules set by the Buddha, so that the results will be felt by those who do the truth themselves (Thurma, 1978). When a person benefits from the practice of Dhamma, confidence (saddhā) will arise in the mind, accompanied by a feeling of happiness as a result of good deeds or things.

3.3. The Influence of Meditation on Buddhist Practice

The influence of meditation on Buddhist practice encompasses various profound and important aspects of a Buddhist practitioner's spiritual journey. Meditation is not only considered a contemplative technique but also a means to achieve a deeper understanding of Buddhist teachings and to develop inner qualities that support the journey toward enlightenment. Apart from that, meditation has the aim of increasing human spirituality, especially Buddhists, and also provides great benefits and influence on the physical and spiritual aspects of Buddhists with procedures that have been arranged in such a way (Ulfah et al., 2019).

The following are some of the influences of meditation on Buddhist practice:

- (i) Increased Concentration (Samadhi). Meditation helps Buddhist practitioners to develop higher levels of concentration (Griffiths, 1981). In Buddhist practice, deep concentration is known as samadhi. Meditation helps overcome distractions and focus the mind on a particular object or focus, which is an important step in understanding and overcoming suffering (Dhammapitaka & Payutto, 1999).
- (ii) Development of Consciousness (Sati). The practice of meditation, especially the mindfulness (sati) type, strengthens the ability to become aware of present experiences. This awareness helps practitioners to see reality clearly and without distortion, which is the key to understanding the Four Noble Truths in Buddhism (Shulman, 2010).
- (iii) Development of Wisdom (Panna). Meditation plays a crucial role in the development of wisdom (panna) (Khong, 2021). In the context of Buddhist practice, wisdom refers to a deep understanding of the nature of suffering, its origins, and how to overcome it. Through meditation, practitioners can investigate the inner nature and develop a deeper understanding of the nature of existence.
- (iv) Self-Empowerment to Overcome Inner Obstacles (Klesa). Meditation helps Buddhist practitioners face and overcome inner obstacles, known as klesas. Klesas involve negative emotions such as desire, hatred, and confusion. Through meditation, one can observe and control one's emotional reactions, leading to liberation from emotional bondage and suffering.
- (v) Brings Inner Peace and Prosperity. Meditation practices, especially compassion meditation (metta), help to form a positive mental attitude and a sense of compassion towards all beings. It provides inner peace and helps form a positive attitude towards oneself and others.

3.4. The Impact of Meditation on Psychological and Physical Aspects of Individuals

Meditation is a method for training oneself to control and focus attention on something without criticizing it (Speeth, 1982). Meditation is also an exercise in the form of therapy to develop fully self-aware behavior (Richards et al., 2010). Meditation has a positive impact on mental conditions, such as improving emotional regulation, because meditation helps individuals be more emotionally stable and generate positive emotions, as well as develop conscious behavior.

Apart from that, meditation can overcome anxiety and relieve stress (Lemay et al., 2019). The reason is, that meditation is a physical activity that can produce endorphin hormones which act as natural pain relievers, so stress is reduced (Rhoads, 2013). Meditation, if done regularly, can improve concentration, and memory and prevent dementia. Strengthens body endurance.

4. CONCLUSION

In general, research interest in the correlation between meditation and Buddhism increased in 2020. This research highlights the relevance of this relationship in the context of increasing awareness of mental well-being amidst the COVID-19 pandemic. Apart from that, the results of the bibliometric analysis obtained 2 forms of visualization, namely network visualization and overlay visualization. Based on network visualization, the number of clusters obtained during the research process was 5 clusters, of course with a different number of items and marked with a different color for each cluster. Meanwhile, based on the visualization overlay, new topics that are relevant to related research are widely used in 2020.

Additionally, the bibliometric results also reflect that researcher are increasingly interested in exploring the potential of Buddhist meditation as an effective tool in overcoming mental challenges, such as stress and anxiety. These findings make an important contribution to our understanding of how meditation practice in a Buddhist context can be a valuable resource in managing mental well-being, and its implications may extend to the development of mental health strategies that are more holistic and relevant to the challenges of the times.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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