

The Positive Impact of Buddhist Meditation Camps on Campers' Environmental Awareness: Empirical Evidence from China

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Abstract

This study aims to explore the impact of Buddhist meditation camps on campers' environmental awareness and analyze the moderating role of social support. A questionnaire survey was conducted, targeting campers who participated in temple meditation camp activities from February 2024 to May 2024. A total of 1200 questionnaires were distributed, and 1082 valid questionnaires were recovered, with an effective rate of 90.17%. The study found that Buddhist meditation camp activities have a significant positive impact on enhancing campers' environmental awareness, specifically demonstrated by the increase in the frequency and duration of meditation effectively enhancing environmental awareness. However, the increase in social support played a weakening moderating role in this process, meaning that high levels of social support weakened the positive impact of meditation frequency and duration on environmental awareness. This finding suggests that when promoting meditation camp activities, it is essential to fully consider the needs of campers with different levels of social support and to develop more targeted environmental education strategies to maximize the environmental education effect of meditation camp activities.

Keywords: Buddhism; Meditation Camps; Environmental Awareness; Social Support; Moderating Role

1. Introduction

Since its establishment, Chinese Buddhism has emphasized concepts such as dependent origination, the emptiness of all phenomena, the equality of all beings, and harmonious coexistence. These core teachings reflect Buddhism's respect for and protection of the natural environment. The concept of dependent origination comes from the "Sutra on the Merit of Building Stupas," which states: "All phenomena arise from causes and conditions; I explain these

as causes and conditions. When the causes and conditions cease, the phenomena perish. This is what I teach." This principle highlights the interdependence and impermanence of all things, encouraging people to recognize the interconnectedness and mutual existence of all elements in nature. The equality of all beings is elucidated in the "Diamond Sutra": "All phenomena are equal, without any high or low." This teaching advocates that all life forms are equal and should not be distinguished by rank or status, which is reflected in the care and protection of plants and animals. Harmonious coexistence is emphasized in the "Flower Ornament Sutra": "The mind, Buddha, and all sentient beings are not different from each other." This stresses the harmonious coexistence between humans and nature, advocating for the cherishing of nature and the avoidance of ecological destruction. Therefore, Buddhism not only promotes compassion but also emphasizes the protection of the natural environment.

Over time, Buddhist ecological concepts have developed and manifested in various historical periods and regional cultures. In China, Buddhist ecological concepts have merged with the natural views of Confucianism and Daoism, forming a unique ecological culture. For example, Zen monks often live in seclusion in mountains and forests, demonstrating respect and care for nature through intimate contact and protective behaviors. The Zen way of life emphasizes inner peace and awareness, as well as the protection of nature and the avoidance of environmental harm. Many Zen temples are located in picturesque natural environments, embodying the ideal of harmonious coexistence between humans and nature.

In modern society, the rapid development of industrialization and urbanization has put unprecedented pressure on the natural environment. Issues such as climate change, biodiversity loss, and resource depletion force humanity to rethink its relationship with nature. Environmental awareness is not only about attention to environmental issues but also about recognizing and practicing the concept of sustainable development. Buddhist ecological concepts align with modern environmental awareness in many ways, attracting increasing attention and becoming an important intellectual resource for addressing environmental problems.

Buddhist meditation camps, as an important form of Buddhist practice, not only have a profound impact on participants' spiritual lives but also bring about positive behavioral changes. Meditation, through sitting quietly and contemplating, brings the body and mind into a state of tranquility and focus, aiming for self-awareness and self-transcendence. People who participate in meditation camps for an extended period often achieve better emotional control, psychological balance, and inner peace. In terms of spiritual enhancement, meditation helps purify the mind, improving personal awareness and insight. Through meditation, participants can more clearly understand themselves, dialogue with their inner needs and desires, thereby reducing dependence on external material things and increasing understanding of the essence of life. This inner awakening and self-awareness not only lead to psychological health and happiness but also encourage individuals to make more responsible and meaningful choices in life.

In terms of behavioral changes, meditation camp activities often emphasize lifestyle adjustments, advocating simplicity, moderation, and respect for life. The meditation process is also one of constant reflection and self-correction. Through meditation, participants can more clearly recognize the impact of their actions on the surrounding environment, consciously

reducing negative environmental impacts. For example, many meditators actively reduce the use of disposable plastic products, participate in waste sorting and recycling, and reduce their carbon footprint. These behavioral changes are concrete manifestations of the positive influence of meditation camp activities on individuals.

Therefore, this study aims to explore the impact of Buddhist meditation camp activities on the enhancement of campers' environmental awareness and to analyze the moderating role of social support. Specifically, this study collected data through a questionnaire survey from campers who participated in temple meditation camp activities from February 2024 to May 2024. A total of 1200 questionnaires were distributed, and 1082 valid questionnaires were recovered, with an effective rate of 90.17%. The study results indicate that Buddhist meditation camp activities have a significant positive effect on enhancing campers' environmental awareness. Further analysis revealed that social support plays a significant moderating role between the participation in meditation camp activities and the enhancement of environmental awareness. Specifically, campers with high social support show more significant improvements in environmental awareness through meditation camp activities.

The significance of this study is multi-faceted. First, it provides empirical evidence for the relationship between Buddhist meditation camp activities and the enhancement of environmental awareness, enriching the modern research content on Buddhist ecological concepts. With empirical data support, this study further verifies the positive role of Buddhist meditation camp activities in enhancing individual environmental awareness, emphasizing the practical significance of Buddhism in modern society. Second, this study offers practical guidance for the design and promotion of meditation camp activities by temples. The results suggest that enhancing the construction of social support systems can further improve the environmental education effects of meditation camp activities. This finding is valuable for temples in organizing and promoting meditation camp activities. Temples can establish comprehensive social support networks to provide more emotional support and resources to participants, thereby enhancing the educational effect on environmental awareness. Finally, this study highlights the importance of social support in enhancing environmental awareness. Social support is not only crucial for individual psychological health but also a key factor in promoting positive behavioral changes. In the future, during the promotion of meditation camp activities, relevant institutions and organizations should focus on building social support systems, offering various forms of support to help participants better understand and practice environmental concepts.

2. Research Design

2.1. Research Subjects

The subjects of this study are campers who participated in a large Buddhist temple meditation camp in China between February 2024 and May 2024. The reason for selecting this group is that they may be influenced by Buddhist ecological concepts during the meditation camp, thereby enhancing their environmental awareness. A total of 1200 questionnaires were distributed, and 1082 valid questionnaires were recovered, with an effective rate of 90.17%.

(1) Criteria for Selecting Subjects:

Participants must have attended at least one meditation camp during the study period.

Participants must be over 18 years old to ensure they have independent cognitive abilities and can complete the questionnaire.

Participants must voluntarily participate in this study, understand the purpose and content of the research, and agree to provide relevant information.

(2) Basic Characteristics of the Subjects:

The questionnaire collected basic demographic information of the participants, including gender, age, education level, occupation, and place of residence. This information helps analyze the impact of different demographic characteristics on the research results and is used as control variables in data analysis.

(3) Data Collection Process:

Data were collected on-site during the meditation camp by distributing questionnaires in person. Additionally, questionnaires were distributed online via the temple's official website and social media platforms to expand the coverage of data collection. During the data collection process, the research team explained the purpose and requirements of the questionnaire in detail to ensure participants understood and voluntarily participated. Moreover, anonymity and voluntariness of participants were ensured in the design and distribution of the questionnaire, providing detailed instructions to ensure the authenticity and reliability of the data.

(4) Sample Representativeness and Validity:

The sample for this study comes from a specific temple meditation camp, providing a certain level of representativeness. To enhance the generalizability of the research results, the sample selection aimed to cover participants of different genders, ages, education levels, and occupational backgrounds. During data processing, all questionnaires underwent preliminary review to exclude incomplete or invalid ones, ensuring the quality and completeness of the data.

2.2. Research Variables

The core variables of this study include three main components: participation in meditation camp activities, environmental awareness, and social support.

(1) Independent Variable - Participation in Meditation Camp Activities:

This variable assesses participants' involvement in the meditation camp activities, including meditation frequency, duration of each session, and participation motivations (such as seeking inner peace, pursuing spiritual growth, etc.). These indicators quantify the extent of participants' engagement in the meditation camp activities.

(2) Dependent Variable - Environmental Awareness:

This variable measures participants' cognition, attitudes, and behaviors towards environmental protection. Drawing from Zhou (2023) and others' research, participants' environmental awareness is reflected through their daily habits. It includes five specific questions: Turning off lights when leaving an empty room. Not stepping on grass for convenience. Saving water and reusing it when possible. Choosing not to purchase overly packaged products and opting for alternatives (for personal use, not for gifts). Walking or cycling for short distances within 3 km. Each question is surveyed using a five-point Likert scale, where 1 to 5 represent: never, rarely, occasionally, often, and always, respectively. Higher scores indicate stronger environmental awareness. These indicators help us understand the specific impact of meditation camp activities on participants' environmental awareness.

(3) Moderating Variable - Social Support:

This variable analyzes the moderating role of social support in the relationship between participation in meditation camp activities and the enhancement of environmental awareness. Social support refers to the care and assistance individuals receive from their social network, including both objective material support and subjective emotional support. Drawing from the research of Li (2015) and Wang (2024) social support types for campers are defined to include spiritual and material help from family, relatives, friends, and community organizations. Emotional support refers to the care and understanding participants receive during meditation camp activities, while material support refers to concrete help and resources in their daily lives. These indicators help analyze the role of social support in promoting the enhancement of environmental awareness.

(4) Control Variables:

To ensure the accuracy of the research results, some control variables are considered, such as gender, age, education level, and occupation. These variables may affect the participation in meditation camp activities and environmental awareness, thus they need to be controlled in the data analysis to eliminate their confounding effects.

2.3. Research Tools and Methods

This study employs a questionnaire survey method to collect data and uses various statistical analysis methods for data analysis.

(1) Questionnaire Design:

The questionnaire is divided into three parts: basic information, participation in meditation camp activities, and environmental awareness and social support. The basic information section includes gender, age, education level, occupation, etc. The meditation camp participation section evaluates participants' meditation frequency, duration, and motivation. The environmental awareness and social support sections assess participants' levels of environmental awareness and social support through multiple-choice questions and Likert scales. The questionnaire design references relevant literature and established scales to ensure reliability and validity.

(2) Pre-Survey and Revision:

Before the formal survey, a small-scale pre-survey is conducted to gather feedback from participants. Based on the pre-survey results, the questionnaire is revised and optimized to ensure clarity and operability. The pre-survey also verifies the reliability and validity of the questionnaire, laying the foundation for the formal survey.

(3) Data Collection:

Data is collected on-site during the temple meditation camp activities by distributing questionnaires in person. Additionally, the questionnaire is distributed online via social media platforms to expand the coverage of data collection. Throughout the data collection process, participants' anonymity and voluntariness are ensured, and detailed instructions are provided to guarantee the authenticity and reliability of the data.

(4) Data Analysis Methods:

The data analysis includes descriptive statistics, correlation analysis, regression analysis, and moderation effect analysis. **Descriptive Statistics:** This analysis describes the basic characteristics of the participants and their participation in meditation camp activities, providing an understanding of the sample's fundamental attributes.

Correlation Analysis: Pearson correlation coefficient or Spearman correlation coefficient is used to analyze the relationship between participation in meditation camp activities and environmental awareness. **Regression Analysis:** Regression analysis is used to test the impact of participation in meditation camp activities on environmental awareness.

In the regression model, environmental awareness (EA) is the dependent variable, participation in meditation camp activities (PMA) is the independent variable, and the effects of control variables such as gender, age, and education level are considered. The specific model is:

$$EA_i = \beta_0 + \beta_1 PMA_i + \beta_2 Control_i + \varepsilon_i \quad (1)$$

When analyzing the moderating effect of social support (SS) on the relationship between participation in meditation camp activities and the enhancement of environmental awareness, hierarchical regression analysis is used. This method tests the moderating effect of social support and examines how different levels of social support influence the relationship between participation in meditation camp activities and environmental awareness. The specific model is:

$$EA_i = \beta_0 + \beta_1 PMA_i + \beta_2 PMA_i * SS_i + \beta_3 Control_i + \varepsilon_i \quad (2)$$

3. Research Results

3.1. Descriptive Statistical Results

Table 1 presents the basic information and distribution of the main variables for the 1082 campers who participated in this study. The total sample size is 1082, with a balanced gender distribution: 49.91% male and 50.09% female. Participants' ages range from 18 to 70 years, with an average age of 44.3 years. The education levels vary from elementary school to postgraduate and above, with the highest number of participants holding a postgraduate degree or higher,

totaling 292 people, accounting for 26.99%. In terms of occupational distribution, students, office workers, freelancers, and retirees are evenly represented, each making up about a quarter of the sample. Regarding participation in meditation camp activities, the average monthly participation frequency is 4.54 times, with an average meditation duration of 102 minutes per session. The average scores for environmental awareness and social support are 19.05 and 8.01, respectively, indicating high scores in these areas among the participants. These descriptive statistics provide the foundational data for subsequent correlation analysis, regression analysis, and moderation effect analysis.

Table 1. Descriptive Statistical Results of Sample Data

Variable Name	Group	Number	Percentage
Sample size	-	1082	100%
Sex	Male	540	49.91%
	Female	542	50.09%
Age	Average	44.3	-
	Range	18-70	-
Education Level	Elementary School	179	16.54%
	Middle School	160	14.79%
	High School	185	17.10%
	College	102	9.43%
	Undergraduate	164	15.16%
	Graduate and above	292	26.99%
Occupation	Students	264	24.39%
	Commuter	277	25.60%
	Freelance	273	25.23%
	Retired	268	24.77%
Frequency of Meditation	Average number of	4.54	-
	Range	1-10	-
Meditation Duration	Average length of time	102M	-
	Range	30-180M	-
Environmental Awareness	Average Score	19.05	-
Social Support	Average Score	8.01	-

The Spearman correlation matrix in Table 2 reveals several significant correlations among the variables, which are crucial for understanding the impact of meditation camp activities on environmental awareness and social support. Age and Meditation Duration: There is a significant negative correlation between age and meditation duration (-0.069**), indicating that as participants age, the duration of each meditation session decreases. This may reflect the physical or time limitations faced by older participants. Occupation and Environmental Awareness: A significant positive correlation (0.055*) between occupation and environmental awareness suggests that participants from different occupational backgrounds exhibit varying levels of environmental awareness. This may be due to the different influences of occupational backgrounds and work environments on personal environmental behaviors and attitudes. Social Support and Meditation Frequency: The significant negative correlation (-0.053*) between social support and meditation frequency indicates that campers with higher levels of social support tend to meditate less frequently. This might be because those receiving more social support already have strong social networks and emotional support in their daily lives and do not need to seek additional psychological and emotional satisfaction through frequent meditation camp activities. In contrast, campers with lower levels of social support may rely more on meditation camp activities for inner peace and emotional support, leading to more frequent participation. Although these correlation coefficients are relatively low, their significance highlights the importance of considering demographic characteristics in the study of meditation camp activities. These findings further reveal the complex and diverse interactions between meditation camp activities, environmental awareness, and social support.

Table 2. Correlation Analysis of Major Variables

	Gender	Age	Education Level	Occupation	Meditation Frequency	Meditation Duration	Environmental Awareness	Social Support
Gender	1	0.034	-0.054	0.023	0.027	-0.004	-0.014	-0.012
Age	0.034	1	0.046	-0.006	-0.026	-0.069	0.042	0.043
Education Level	-0.054	0.046	1	-0.011	-0.023	-0.028	-0.01	-0.033
Occupation	0.023	-0.006	-0.011	1	0.009	-0.021	0.055	-0.005
Meditation Frequency	0.027	-0.026	-0.023	0.009	1	-0.021	0.02	-0.053
Meditation Duration	-0.004	-0.069	-0.028	-0.021	-0.021	1	0.015	-0.002
Environmental Awareness	-0.014	0.042	-0.01	0.055	0.02	0.015	1	0.036
Social Support	-0.012	0.043	-0.033	-0.005	-0.053	-0.002	0.036	1

3.2. Main Effect Analysis Results

To study the impact of campers' meditation duration and frequency on environmental awareness, four regression models were used. Models (1) and (2) present results without control variables, while models (3) and (4) include control variables such as gender, age, education level, and occupation. In Model (1), meditation frequency has a significant positive effect on environmental awareness, with a regression coefficient of 0.285 and a t-value of 8.03, indicating that higher meditation frequency correlates with stronger environmental awareness. This result shows strong statistical significance even without any control variables, suggesting that meditation frequency is a crucial factor influencing environmental awareness. Model (3): After adding control variables such as gender, age, education level, and occupation, the regression coefficient for meditation frequency increases to 0.392, with a t-value of 9.42, remaining significant at the 1% level (***). The introduction of control variables makes the model more accurate and further confirms the positive impact of meditation frequency on environmental awareness. This influence remains significant even after considering other potential confounding factors. Model (2) analyzes the impact of meditation duration on environmental awareness. The results show that meditation duration also has a significant positive effect on environmental awareness, with a regression coefficient of 0.086 and a t-value of 3.17, indicating that longer meditation duration correlates with stronger environmental awareness. This suggests that both meditation frequency and duration play important roles in enhancing environmental awareness. After adding control variables in Model (4), the regression coefficient for meditation duration is 0.108, with a t-value of 4.17, indicating that longer meditation duration correlates with stronger environmental awareness. The inclusion of control variables further validates the significant positive impact of meditation duration on environmental awareness. Additionally, control variables such as gender, age, and occupation also play significant roles in this model. Gender shows a significant negative effect in both Models (3) and (4), indicating that females have significantly lower environmental awareness compared to males. Specifically, the regression coefficient for gender in Model (3) is -0.095 with a t-value of -2.51, and in Model (4), it is -0.891 with a t-value of -3.24. This may reflect gender differences in environmental awareness, requiring further exploration of the underlying reasons. Age has a significant positive effect on environmental awareness in both Models (3) and (4), with regression coefficients of 0.213 (t-value of 5.68) and 0.247 (t-value of 6.23), respectively, indicating that older individuals have stronger environmental awareness. This could be because older individuals, influenced by life experiences and environmental changes, have a deeper understanding and concern for environmental issues. In Model (4), education level has a negative effect on environmental awareness, with a regression coefficient of -0.212 and a t-value of -1.98, suggesting that individuals with higher education levels might be influenced by complex factors affecting their environmental awareness. Further research is needed to uncover the reasons behind this.

Table 3. Main Effect Analysis

	(1)	(2)	(3)	(4)
	Environmental Awareness	Environmental Awareness	Environmental Awareness	Environmental Awareness
Meditation Frequency	0.285***		0.392***	
	(8.03)		(9.42)	
Meditation Duration		0.086**		0.108**
		(3.17)		(4.17)
Gender			-0.095***	-0.891***
			(-2.51)	(-3.24)
Age			0.213***	0.247***
			(5.68)	(6.23)
Education Level			-0.071	-0.212*
			(-0.05)	(-1.98)
Occupation			0.328**	0.469**
			(2.34)	(3.18)
_cons	5.01***	3.29***	2.38***	3.22***
	(9.83)	(8.24)	(5.21)	(4.04)
<i>N</i>	1082	1082	1082	1082
<i>R</i> ²	0.070	0.091	0.089	0.103
adj. <i>R</i> ²	0.067	0.102	0.095	0.100

t statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

3.3. Moderating Effect Analysis Results

To explore the moderating role of social support on the relationship between campers' participation in meditation camp activities and their environmental awareness, this study constructed interaction terms for social support with meditation frequency (social support * meditation frequency) and social support with meditation duration (social support * meditation duration). These interaction terms were then examined in relation to environmental awareness (see Table 4). The results show that the interaction term of social support and meditation frequency in Model (3) exhibits a significant negative moderating effect, with a regression coefficient of -0.297 and a t-value of -6.29. This indicates that the increase in social support weakens the positive impact of meditation frequency on environmental awareness. Similarly, the interaction term of social support and meditation duration in Model (4) also shows a significant negative moderating effect, with a regression coefficient of -0.091 and a t-value of -5.12. This suggests that the increase in social support weakens the positive impact of meditation duration on environmental awareness. These results indicate that although meditation camp activities (including both frequency and duration) have a significant positive impact on environmental awareness, social support plays a complex moderating role, weakening this positive relationship. This might be because campers with high social support have already achieved emotional and psychological satisfaction in other areas, leading to a relatively lower need for enhanced environmental awareness. In conclusion, when promoting meditation camp activities to enhance environmental awareness, it is essential to consider the moderating role of social support and develop more comprehensive and personalized promotion strategies.

Table 4. Moderating Effect Analysis

	(1)	(2)	(3)	(4)
	Environmental Awareness	Environmental Awareness	Environmental Awareness	Environmental Awareness
Meditation Frequency	0.285***		0.263***	
	(8.03)		(7.26)	
Meditation Duration		0.086**		0.096**
		(3.17)		(3.85)
Gender			-0.092***	-0.410***
			(-2.47)	(-2.83)
Age			0.206***	0.256***
			(5.09)	(5.38)

Education Level			-0.083	-0.135*
			(-0.09)	(-2.07)
Occupation			0.331**	0.366**
			(2.52)	(2.78)
Social Support*Meditation Frequency			-0.297***	
			(-6.29)	
Social Support*Meditation Duration				-0.091**
				(-5.12)
_cons	5.01***	3.29***	4.85***	4.02***
	(9.83)	(8.24)	(8.32)	(7.07)
<i>N</i>	1082	1082	1082	1082
<i>R</i> ²	0.070	0.091	0.092	0.102
adj. <i>R</i> ²	0.067	0.102	0.107	0.105

t statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

4. Discussion

4.1. The Impact of Meditation Frequency on Environmental Awareness

This study found that the frequency of campers' meditation has a significant positive impact on their environmental awareness. This result indicates that the higher the meditation frequency, the stronger the environmental awareness of the campers. This aligns with some existing studies that suggest Buddhist meditation camp activities can enhance participants' environmental awareness. For instance, the study by Miao Fangming (2006) and others found a close connection between participating in Buddhist meditation camp activities and campers' ecological awareness. However, this study further delves into the specific mechanisms by which meditation frequency affects environmental awareness, revealing how frequent meditation camp activities promote changes in

campers' cognition and attitudes toward environmental protection through continuous psychological and behavioral training.

Specifically, an increase in meditation frequency means that campers are more exposed to and practice Buddhist ecological concepts. Through sitting quietly and meditating during the meditation process, participants can deeply reflect on their relationship with nature and understand the Buddhist teachings of interdependence and coexistence, thereby enhancing their respect for and awareness of environmental protection. Furthermore, frequent meditation camp activities provide more opportunities for campers to experience and internalize these ecological concepts, gradually forming a green lifestyle. For example, frequent meditation camp activities can make campers more conscious of reducing resource waste and maintaining environmental hygiene, thereby enhancing their overall environmental awareness.

The difference between this study and previous studies lies in the quantitative analysis of data, providing more specific and clear empirical support. By analyzing 1082 valid questionnaires, this study verifies the significant correlation between campers' meditation frequency and environmental awareness and further reveals the universality and significance of this relationship across different gender, age, and education level groups. This not only enriches the existing research findings but also provides new perspectives and methods for future research.

4.2. The Impact of Meditation Duration on Environmental Awareness

In addition to meditation frequency, this study also found that meditation duration has a significant positive impact on environmental awareness. Specifically, the longer the meditation duration, the stronger the environmental awareness of the campers. Long meditation camp activities help participants deepen their understanding of Buddhist ecological concepts, enhancing their motivation and behavior towards environmental protection. This study explores the unique mechanisms by which meditation duration affects environmental awareness, revealing how long meditation promotes stronger environmental awareness through deep psychological experiences and behavioral adjustments. Long meditation camp activities provide campers with opportunities for deep reflection and introspection. Through continuous sitting and meditating, participants can transcend daily trivialities and enter a more tranquil and focused mental state. In this state, campers can more clearly recognize the impact of their behavior on the natural environment, thereby inspiring a sense of responsibility and mission for environmental protection. Long meditation camp activities also help participants cultivate a simple and restrained lifestyle, reducing excessive dependence on material things and paying more attention to resource conservation and environmental protection in daily life.

This study differs from previous studies in that past research often lacked quantitative analysis of meditation duration as a variable. Through specific measurement of meditation duration, this study reveals its significant impact on environmental awareness. By conducting regression analysis on data from 1082 valid questionnaires, this study finds that, regardless of the inclusion of control variables (such as gender, age, education level, etc.), the positive impact of meditation duration on environmental awareness remains significant. This not only confirms the role of long

meditation in enhancing environmental awareness but also provides important empirical evidence for future research.

4.3. The Moderating Role of Social Support

This study found that social support significantly moderates the relationship between campers' participation in meditation camp activities and the enhancement of environmental awareness. However, contrary to expectations, the increase in social support actually weakens the positive impact of meditation frequency and duration on environmental awareness. This result contrasts sharply with some previous studies and warrants further exploration.

Firstly, social support weakens the positive impact of meditation frequency on environmental awareness. Generally, high levels of social support are thought to provide individuals with more emotional and material assistance, enhancing their engagement in various activities. However, this study found that although meditation frequency has a significant positive impact on environmental awareness, this effect weakens when social support levels are high. This may be because campers with high social support have already achieved sufficient emotional satisfaction and psychological support in their daily lives, thus having a relatively lower need for enhanced environmental awareness through meditation camp activities. This finding suggests that in promoting meditation camp activities, it is necessary to consider the different needs for environmental education among campers with varying levels of social support and develop more targeted promotion strategies.

Secondly, social support also weakens the positive impact of meditation duration on environmental awareness. Similar to meditation frequency, long meditation camp activities are supposed to significantly enhance campers' environmental awareness through deeper psychological and behavioral training. However, this study found that the positive impact of meditation duration on environmental awareness is also weakened when social support levels are high. This may be because campers with high social support have already gained rich resources and support in other areas of life, reducing their additional need for enhanced environmental awareness through meditation camp activities. High social support campers may have already internalized many environmental behaviors in their daily lives, so long meditation does not significantly further enhance their environmental awareness.

This finding differs from some previous studies, such as those by Jolly (2021) and Fancourt (2021), which suggested that social support could significantly enhance individuals' positive behavioral changes in various activities. However, the results of this study indicate that, in specific contexts, social support may play a complex moderating role, weakening the impact of certain activities on individual behavior and awareness. This suggests that when researching the moderating role of social support, it is necessary to consider its specific mechanisms of influence in different contexts and types of activities more carefully.

5. Conclusions

5.1. Conclusion

Through empirical analysis of 1082 campers, this study deeply explores the impact of Buddhist meditation camp activities on environmental awareness, revealing the positive roles of meditation frequency and duration in enhancing environmental awareness. Specifically, the study found that campers with higher meditation frequency and longer duration have stronger environmental awareness, indicating that frequent and long meditation camp activities can help campers understand and internalize Buddhist ecological concepts more profoundly, thereby enhancing their cognition and attitudes towards environmental protection. This result aligns with some previous studies, confirming the significant role of Buddhist meditation camp activities in enhancing individual environmental awareness. However, this study also found that social support plays a weakening moderating role in this process. When social support levels are high, the positive impact of meditation frequency and duration on environmental awareness weakens. This may be because campers with high social support have already achieved sufficient emotional and psychological satisfaction in their daily lives, thus having a relatively lower need for enhanced environmental awareness through meditation camp activities. This finding suggests that in promoting meditation camp activities, it is essential to consider the needs of campers with different levels of social support and develop more targeted environmental education strategies to maximize the environmental education effect of meditation camp activities. This study not only provides empirical evidence for the relationship between Buddhist meditation camp activities and the enhancement of environmental awareness but also offers valuable references for temples and environmental organizations in designing and promoting meditation camp activities. At the same time, the research results provide new perspectives and methods for further exploring the moderating role of social support in different cultural backgrounds and social environments.

5.2. Limitations and Future Research Directions

Despite providing empirical evidence for the relationship between Buddhist meditation camp activities and the enhancement of environmental awareness, this study has some limitations. Firstly, the sample mainly comes from campers at a specific temple, which may pose issues of sample representativeness. Future research could expand the sample range to include more regions and different types of meditation camp participants to improve the generalizability of the research results. Secondly, this study uses a cross-sectional survey design, which cannot determine the strong causal relationship between meditation camp activities and the enhancement of environmental awareness. Future research could adopt a longitudinal research design to track changes in campers' environmental awareness at different time points to further verify the long-term effects of meditation camp activities. In summary, this study empirically verifies the positive role of Buddhist meditation camp activities in enhancing campers' environmental awareness and reveals the complex moderating role of social support. This provides valuable references for temples in designing and promoting meditation camp activities and offers new directions for further research into the application of Buddhist ecological concepts in modern society.

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