p-ISSN: 2184-2205 e-ISSN: 2184-3414 ISBN: 978-989-35106-6-7 © 2024
https://doi.org/10.36315/2024inpact014

THE POSITIVE IMPACT OF MINDFULNESS RETREATS ON PHYSICAL AND MENTAL HEALTH WELL-BEING OF NON-CLINICAL INDIVIDUALS

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Abstract

In recent decades, the art of mindfulness has gained popularity in Western societies, merging this Buddhist practice with popular modern culture. The popularity of this consciousness explorative technique has also crept into the scientific field of psychology, where more than 200 research studies have supported its efficacy with plenty of empirical data. The addition of scientific evidence has given mindfulness comforting confidence to the practitioners engaged in this healing process. It has also gained popularity with non-clinical individuals who practice it by helping them bring clarity, relief, awareness, and peace to millions. However, there is still a dire need to fully understand mindfulness therapy's process and effectiveness to maximize its potency. As supportive as the scientific data has been in validating mindfulness in stress reduction and anxiety management, there has been very little research on its potential downsides. Although it is vital to understand the history and lineage of this process, it is necessary to understand the proper use of mindfulness techniques, how it should be practiced, and in what mode of delivery it will maximize the user's benefit. Using existing evidence-based and secondary empirical data, this paper will explore the latest scientific discoveries on teaching individuals in a retreat setting to become conscious-minded using nature-based mindfulness techniques and how to employ them in everyday life while committing to a healthy lifestyle.
Furthermore, the authors will explore the pitfalls and the shortcomings of existing research on the benefits of mindfulness retreats. Finally, this paper will explore the possibility of standardized retreat protocols, appropriate techniques, and the intricate criteria for maximizing mindfulness meditation techniques in a retreat setting. Based on the findings, the authors will propose an optimized design for a mindfulness-guided retreat using nature-based and ecological criteria to help the participants gain knowledge on how to control negative self-talk, learn to manage stress and reduce anxiety, develop emotional regulation skills, and maintain neurological adjustment in high-stress life circumstances.

Keywords: *Mindfulness retreat, nature-based self-help, meditation.*

1. Introduction

Buddhism describes mindfulness as enhanced awareness focused on the present moment without the restraints of emotional attachment, function, or object. A walk in nature where the person notices the beauty and wonder of a flower and is mesmerized by its structural beauty and wonderment of creation. It is living in the moment to the fullest rather than containment in the past or the future (Bateman, 2012). Mindfulness training, as conducted in retreats, combines the art of skill building with attention and awareness training, which contemporary psychological theories believe to be essential in positively affecting mental health and overall well-being (Hadash et al., 2023). Mindfulness practices may involve meditation), focusing and sustaining attention breathing techniques, daily mindful activities, or practices conducted in natural settings (Kabat-Zinn, 2013).

2. Objectives

This research study aims to demonstrate the positive impact of mindfulness retreats on adults' physical and mental health. The authors conducted a systematic review of the existing literature relevant to the focus of our study that also met the specific criteria set by the authors.

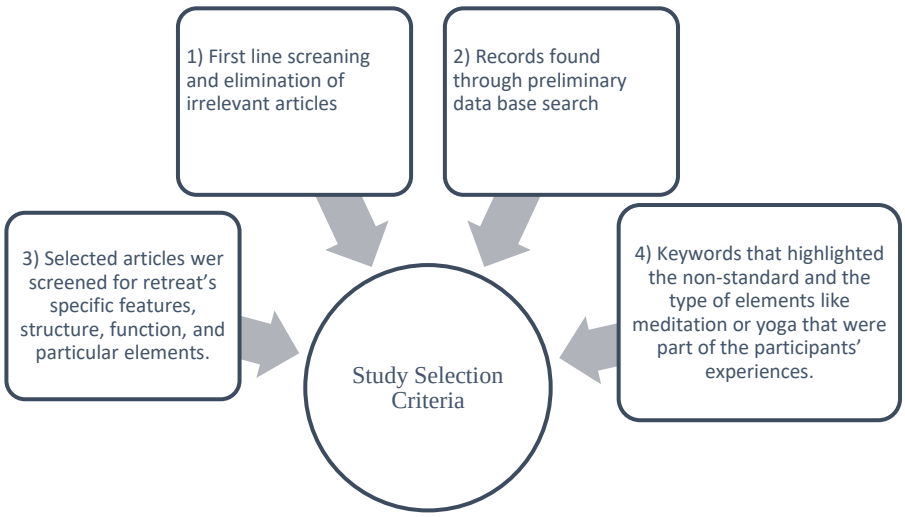
3. Method

The authors conducted a comprehensive systematic review methodology using standardized search operators, including the definition of mindfulness and the structure of current retreats. Separately, the research design aimed to reference retreats' structural and functional aspects, such as duration, exercises, and standard practices in current mindfulness retreats. Methods used in this study were a comprehensive literature search using PsychINFO, PubMed, Cochrane Library, and Google Scholar. After removing duplicates and applying the eligibility criteria, the following studies were included in the present review.

4. Design

A systematic search design was conducted using keywords such as mindfulness and retreat in the title or abstract of any peer-reviewed study published by high-impact publications. The selected keywords were grouped into two main categories. A group of keywords was set to identify articles whose goal of the study was to define mindfulness definition, purpose, and technique, including search terms related to "mindfulness, application, impact, population, result, and expectations. The next category was groups of keywords used to describe (a) The retreat's specific features, structure, function, and particular elements, and b) Keywords that highlighted the non-standard and the type of elements like meditation or yoga that were part of the participants' experiences (See Figure 1).

Figure 1. Study Selection Criteria.



5. Discussion

Mindfulness is a physiological as well as a psychological phenomenon. A life experience with a special physiological meaning is linked to synchronous activity in a paralimbic self-awareness network and dopaminergic activity (Joensson et al., 2015) involving a set of networks of medial prefrontal and parietal/posterior cingulate cortices. Magnetic imaging has shown that transcranial magnetic stimulation may transiently impair self-awareness, demonstrating the correlation between dopamine and self-awareness. Mindfulness retreats that include meditations result in an increased dopamine secretion.

Mindfulness retreats are usually advertised to healthy, non-clinical adult populations to optimize psychological health. Within the structure of these retreats, additional criteria such as stress and anxiety management, overall well-being, or depression reduction may also be included. The following sections present and discuss different types and criteria of a sample of such retreats.

5.1. A 3 day residential retreat

A sample of 95 healthy individuals ages 18 to 67 participated in an intensive mindfulness practice to manage biological mediators of stress and inflammation. Due to the biological assessment criterion, all the participants were assessed for salivary cortisol levels. Psychometric measures on stress, anxiety, and awareness were carried out. Results show a significant decrease in perceived stress ($\beta = -8.85$, $p < 0.0001$) and anxiety scores ($\beta = -12.39$, $p < 0.0001$), while awareness increased ($\beta = 15.26$, $p < 0.0001$). The participants in this mindfulness retreat showed a significant reduction in perceived stress and anxiety levels. Additionally, they experienced an improved balance of some critical inflammatory state mediators, leading to physical and mental health and well-being (Gardi et al., 2021).

5.2. A 5-day residential retreat

A pilot study where a group of Danish college students were randomly assigned to three studies with different interventions to review the potential effectiveness of a 5-day indoor residential mindfulness intervention. The primary outcomes were self-compassion and perceived stress levels. The 12-item, short-form Self-Compassion Scale (SCS-SF) measured how individuals treat themselves with kindness and concern when faced with loss, failure, rejection, etc. Results based on all three programs showed improved self-compassion and reduced stress post-treatment. Trait mindfulness was positively affected both post-treatment and at follow-up. The exact curriculum taught in a natural outdoor setting had equally positive effects, with incremental effects on connectedness to nature (Djernis et al., 2021).

5.3. Meta-analysis on psychological functioning

A meta-analysis of 63 full texts on the effects of mindfulness retreats on the psychological functioning of relatively healthy adults was conducted. The first screening was based on design, sample characteristics, retreat intensity, duration, and psychological outcomes studied, and due to many of the studies needing more methodological rigor, only 19 made the final cut for a meta-analysis. An analysis from pre-retreat to follow-up found an effect size of 0.58 (95% CI, 0.39, 0.77) for mindfulness outcomes. The final results showed that mindfulness could be correlated to improved mental and physical health in healthy adults. The reviewed research supports commonly held beliefs that mindfulness retreats may be an effective option for optimizing psychological health and reducing the risk of mental health problems among adults in the general population (McClintock et al., 2019).

5.4. Mindfulness-based Stress Reduction (MBSR) interventions

Nyklicek et al. concluded that mindfulness may mediate the positive effects of Mindfulness-based stress reduction (MBSR) intervention. The aim was to compare the effects of MBSR to a waiting list control condition while examining the potentially mediating effects of mindfulness (2013). Davidson et al. suggested that MBSR may produce demonstrable brain and immune function effects. The aim was to measure the effects of MBSR on brain and immune function. We do not know whether the EEG-observed significant increases in left-sided anterior activation - a pattern previously associated with positive affect - are of practical or clinical relevance. Not all brain scientists agree that increased left-sided anterior activation is associated with positive affect (2005).

In a meta-analysis of MBSR programs, Williams et al. compared mindfulness-based cognitive therapy (MBCT) with both cognitive psychological education (CPE) and treatment as usual (TAU) in preventing relapse to major depressive disorder (MDD) in people currently in remission following at least three previous episodes. *The articles were selected based on a* randomized controlled trial in which 274 individuals participated. The 21 related research articles showed that self-selected community residents can improve their mental and physical health by participating in an MBSR program. One study objective was to determine whether participants in an MBSR intervention experienced decreases in the effect of daily hassles, psychological distress, and medical symptoms. MBCT provided significant protection against relapse for participants with increased vulnerability due to a history of childhood trauma but showed no significant advantage in comparison to active control treatment and usual care over the whole group of patients with recurrent depression. The results were based only on completers, defined as subjects who completed the control or intervention program and all the questionnaires (Williams et al., 2014).

5.5. One month long meditation retreat

The retreat had pre-enrolled 32 Participants to complete the 100-item States of Consciousness Questionnaire (SOCQ) and the Mysticism Scale before and after three weeks of intensive retreat or daily life. The items on the SOCQ were assessed individually to determine which contributed most to differences between groups at the end of the retreat. The study was conducted with a control group to assess the changes in self-reported mystical dimensions of experience, which were also directly compared between retreat and control participants.

Results of the study showed that the retreat participants reported a much greater extent of profound insights, powerful emotional experiences, and non-ordinary sensory or perceptual events compared to experienced meditators not on retreat. Retreatants also reported greater levels of specific dimensions of mystical experience, including internal unity, transcendence, sacredness, and noetic quality, and they deeply felt positive affect relative to control participants (Zanesco et al., 2023).

6. Implications

A standardized template for assessing the effectiveness of mindfulness retreats needs to be devised to ensure the validity and reliability of the conducted studies. Elements that are instrumental in accurate scientific assessments are as follows:

(a) the geographical location where the retreat took place; b) the research methodology and study design on how the research was conducted (e.g., randomized controlled trial, non-randomized controlled trial, or pre-post design); (c) the presence or lack of presence of a control group (e.g., inactive/waitlist or active); (d) Sample population under the study; (e) Demographic characteristics such as participants' age, gender, and race/ethnicity; (f) Nature of retreat (e.g., meditation and the type of meditation, yoga, indoor, outdoor, nature or structured); (g) duration of the retreat and the number of hours per day; (h) the number of participants who completed the program; (i) compensatory incentives to participate and/or to complete the program if applicable; (j) post assessment if any and follow up measurements if applicable; and (k) type and nature of the expected outcome (psychological, physical, overall well-being).

7. Conclusion

Mindfulness, defined as moment-to-moment non-judgmental awareness, is a skill that can be learned through practice and is believed to promote well-being. Mindfulness has received interest from clinicians and researchers because it seems to improve acceptance of symptoms that are difficult or impossible to change, install a cognitive metareflective capacity that enhances the degree of freedom of patients, and help patients change their focus by emphasizing the experience of the present moment. Mindfulness-Based Stress Reduction (MBSR), as a structured group program that employs mindfulness meditation to alleviate suffering associated with physical, psychosomatic, and psychiatric disorders, has also been known to produce positive results. However, as the interest in mindfulness retreats grows, the need for a more scientific methodology leading to solid empirical data also increases. As the literature on mindfulness constantly expands, requiring regular, updated reviews, future studies with more subjects and follow-up periods may examine mindfulness as a non-pharmacological alternative to promote stress reduction and overall health and well-being.

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