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Research Article

Evaluation of the Mindfulness-Based Wellbeing Enhancement Program: Effects on Wellbeing Outcomes

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The 8-week Mindfulness-Based Wellbeing Enhancement (MBWE) program was designed to enhance mental wellbeing across diverse populations. This evaluation report presents findings from two studies assessing the program's effectiveness. In Study 1, pre- and post-program assessments using the Five Facet Mindfulness Questionnaire (FFMQ) revealed significant improvements across all facets of mindfulness, demonstrating the program's efficacy in cultivating mindfulness among participants. Study 2 examined human flourishing outcomes through self-reported data collected at the program's conclusion, with participants consistently reporting enhanced mental wellbeing across multiple dimensions. Although the absence of control groups in both studies limits the ability to definitively attribute these outcomes to the MBWE program, the overall findings indicate that the MBWE program effectively promotes mindfulness and supports broader mental wellbeing.

Introduction

Mental health challenges are becoming increasingly widespread, with one of the most common manifestations being a pervasive sense of unhappiness. In 2019, approximately 280 million people worldwide in the six WHO regions were affected by depressive disorders[1], underscoring the urgent need for interventions that promote human flourishing and mitigate feelings of unhappiness and dissatisfaction[2]. Human flourishing can simply be defined as the feeling of life going well and developing capacities, such as physical and mental wellbeing[3], while unhappiness or depression can be viewed as the opposite of human flourishing. Unhappiness is influenced by a range of psychological factors such as anxiety, loneliness, and stress[4], along with socioeconomic conditions[5]. The unique way each individual experiences these influences creates added complexity for healthcare providers. For instance, while some individuals may attribute their unhappiness to economic conditions, others may view these as unrelated to their mental wellbeing, underscoring the challenge of finding solutions that are both broadly applicable and individually impactful.

Although many individuals turn to psychological services like psychotherapy to relieve dissatisfaction and distress, these interventions, while effective in reducing symptoms[6], face limitations in reaching large populations due to time constraints in sessions[7] and cost barriers. Moreover, nearly 60% of people with depressive disorders do not seek medical help due to stigma and misconceptions[8]. Many current mental health models focus on symptom reduction, targeting anxiety, depression, or other disorders, with an emphasis on treating pathology

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rather than fostering positive wellbeing and human flourishing[9]. While such approaches are critical for managing acute mental health needs, they often overlook the broader objective of enhancing overall quality of life, resilience, and an individual's capacity to thrive.

This raises a crucial question: Can healthcare solutions be designed not only to address unhappiness but also to actively foster lasting happiness? Although the integration of human flourishing into healthcare remains limited, second-generation mindfulness-based programs, such as Mindfulness-Based Wellbeing Enhancement (MBWE), are designed to address this gap. Unlike traditional models that primarily focus on symptom relief of clinical conditions, MBWE emphasizes the cultivation of holistic wellbeing and human flourishing, offering a more comprehensive approach to mental health and personal growth even in the absence of clinical conditions[10].

Mindfulness, a contemplative practice rooted in traditions such as Zen Buddhism, Hatha Yoga, Advaita Vedanta, and Vipassana, can be broadly defined as the practice of maintaining full awareness of the present moment, deepening concentration and practicing acceptance[10][11][12]. In modern healthcare, mindfulness has become an increasingly integrated component of various interventions, reflecting its growing recognition as a valuable tool for enhancing mental and physical wellbeing. One of the most common ways to introduce and cultivate mindfulness is through structured mindfulness-based programs (MBPs), where participants engage in regular sessions designed to incorporate mindfulness into daily life[13].

Two prominent first-generation MBPs, Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT), have been widely adopted in healthcare, demonstrating positive outcomes across multiple domains. For instance, MBSR has been shown to enhance self-esteem, confidence, and compassion in individuals with intellectual disabilities, while MBCT has been found to improve emotional regulation in some adults[14]. Systematic reviews by Zhang et al.[15] and Lee et al.[16] further validate the effectiveness of mindfulness-based interventions in improving psychosocial health, including anxiety, stress, ADHD, and even physical health.

The success of first-generation Mindfulness-Based Programs (MBPs) in clinical settings is well-documented, demonstrating their effectiveness in reducing symptoms of stress, anxiety, depression, and chronic pain across diverse populations. Moreover, mindfulness has demonstrated the potential to promote human flourishing by increasing happiness, enhancing social relationships, and improving both mental and physical health[17][18]. A recent study by Hwang et al.[19] revealed that participants in an 8-week mindfulness intervention reported positive changes, including increased calmness and emotional stability.

Despite strong evidence supporting mindfulness, its application remains largely restricted to clinical settings. While mindfulness interventions have shown promise in nonclinical contexts, such as improving outcomes for specific groups like university students[20], their generalized effectiveness across broader populations has been questioned[21]. To address this limitation, the Mindfulness-Based Wellbeing Enhancement (MBWE) program was designed to extend the use of mindfulness beyond traditional clinical frameworks, focusing on cultivating holistic wellbeing and promoting human flourishing[10].

The MBWE Program

Mindfulness-Based Wellbeing Enhancement (MBWE) is an innovative mindfulness-based program (MBP) specifically designed to promote human flourishing. A key distinction of MBWE, compared to other MBPs, is its inclusivity; the program is accessible to all individuals, regardless of their mental health history, broadening its applicability beyond traditional therapeutic settings. Unlike first-generation mindfulness-based programs (MBPs) such as Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT), which are primarily designed for individuals with mental health conditions such as severe anxiety, ADHD, or other psychological disorders[22][23][24][25], MBWE is specifically tailored to benefit individuals regardless of the presence or severity of mental health concerns. This broader focus allows MBWE to support both individuals seeking relief from distress and those aiming to enhance their overall wellbeing and flourishing. This inclusive approach broadens the program's accessibility, positioning it as an appreciative mindfulness-based program (MBP) that combines mindfulness practices with elements of positive psychology. By doing so, MBWE encourages participants to integrate these practices into their

daily lives, fostering both personal growth and sustained wellbeing.

The structure of MBWE shares some similarities with traditional first-generation MBPs, as outlined in studies such as Virgili[26] and Jackson et al.[27]. The program spans eight weeks, with participants attending weekly sessions, typically lasting 2.5 hours each, and engaging in a 4-hour silent retreat. Like other mindfulness-based programs (MBPs), MBWE incorporates home practices and exercises assigned after each session, encouraging participants to reinforce and deepen their mindfulness skills between weekly meetings. This ongoing engagement is essential for cultivating sustained personal growth and wellbeing. Core mindfulness practices, such as the body scan, mindful hatha yoga, and sitting meditation[28], are central components of MBWE, reflecting its alignment with MBSR/MBCT. Additionally, didactic elements and interactive exercises are incorporated to enhance participant engagement and promote self-reflection. These components facilitate a deeper understanding of mindfulness concepts and encourage the practical application of mindfulness in daily life.

However, MBWE distinguishes itself by expanding beyond traditional mindfulness practices, incorporating novel activities and approaches, as outlined in Tables 1 and 2, to achieve its distinctive goals. The program seeks to redefine participants' understanding of happiness by cultivating insights into wellbeing enhancement through what Kathirasan and Rai[10] describe as the "happiness paradigm." This paradigm is characterized by a balance of attention to the positive, acceptance of the negative, and purposeful interpretation.

The MBWE program distinguishes itself through six unique features that set it apart from other mindfulness-based programs, emphasizing a holistic, balanced, and socially connected approach to mindfulness[10].

A primary distinction of MBWE lies in its wholeness approach. Unlike traditional mindfulness-based programs that often focus on stress reduction or addressing mental health issues directly, MBWE encourages participants to see themselves as inherently whole, regardless of the personal challenges they may face. This perspective promotes the idea that happiness and wellbeing are aspects of one's true nature, always available to be accessed through mindfulness rather than something to be achieved through fixing or resolving perceived "fragments" of the self.

Adapted first generation MBPs have previously been examined in non-clinical settings, such as through *Koru*, a mindfulness training programme for emerging adults and students[29]. While *Koru* shares some similarities with MBWE, particularly in its focus on integrating stress reduction strategies into participants' daily lives to promote human flourishing, the two interventions differ significantly in scope and design. *Koru* targets students and emerging adults[30][31], while MBWE is designed for broader, general populations. MBWE's 8-week structure, with 150-minute sessions and a 240-minute silent retreat, fosters holistic wellbeing, whereas *Koru's* shorter 4-week program, with 75-minute sessions[29], focuses on addressing stress-related symptoms within its specific demographic. MBWE's extended format supports deeper engagement with mindfulness and wider applicability.

The MBWE program also integrates positive psychology and appreciative inquiry principles, offering a balanced approach to self-insight. In each session, participants are guided through the interactive inquiry to acknowledge both the positive and negative aspects of their experiences, fostering a flexible and accepting mindset. By helping participants reinterpret situations with this balanced perspective, MBWE supports enhanced self-awareness and emotional resilience.

Each MBWE session begins with a short meditation on a metaphor tied to the session's theme, which is a unique aspect of the program. These metaphor-based meditations encourage participants to create their own meanings and insights, fostering a sense of curiosity and personal discovery. This structure allows participants to explore mindfulness themes in a way that is both reflective and personally meaningful.

The MBWE also emphasizes the often-overlooked social dimension of mindfulness by promoting awareness of common humanity. Through practices, exercises, and assignments, the program encourages participants to extend their mindfulness practice beyond individual wellbeing to foster a sense of interconnectedness with the world. This focus on common humanity addresses a gap in traditional mindfulness-based programs and emphasizes compassion and empathy as integral to mindfulness practice.

The program's thematic structure further distinguishes MBWE from other mindfulness

programs. Each session is centred around specific themes, such as curiosity, holistic wellbeing, meaningful engagement, and mindful living. These themes reflect the overarching intentions of MBWE and deepen participants' understanding and experience of mindfulness as it applies to various aspects of life.

Finally, MBWE balances the concepts of "being" and "doing" by encouraging participants to act with intention and purpose without striving. The program acknowledges that action, rooted in desire and intention, plays a crucial role in personal fulfilment and wellbeing. Participants are encouraged to engage in purposeful action, but with an attitude of non-striving, allowing "being" to inform "doing."

Together, these six features create a unique and comprehensive framework within MBWE, emphasizing wholeness, balanced insight, personal discovery, social connectedness, thematic depth, and a balanced approach to action. This makes MBWE an innovative approach to mindfulness, expanding its applications beyond individual psychological wellbeing to include social, emotional, and purposeful dimensions of human flourishing.

These fundamental distinctions also shape the facilitation of the three-layered inquiry process. The process of inquiry is distinctively tailored to steer participants toward personal insights into wellbeing and the happiness paradigm. Unlike traditional mindfulness-based programs where inquiry might centre around recognizing patterns of thought or increasing general self-awareness, MBWE's approach to inquiry is rooted in cultivating a nuanced understanding of happiness and holistic wellbeing.

Essentially, MBWE seeks to generate positive and transformative outcomes in its participants by enhancing their overall sense of wellbeing and happiness. In contrast to first-generation MBPs, which primarily focus on restoring individuals with mental health conditions to a baseline of functional mental health, MBWE emphasizes the proactive cultivation of flourishing and sustained wellbeing. This positions MBWE as a potentially more expansive and future-oriented approach to mindfulness-based programs.

	Same as first-generation MBPs	Different from first-generation MBPs
Didactic components and exercsises	Thoughts and feelings exercise	Wellbeing self-assessment
	Poem: The Guest House	The brain and mindfulness
	Nourishing and depleting review (adapted into meaningful engagement exercise)	Asset-based mindset
	Alternative viewpoints exercise (adapted into perspective-taking exercise)	Character strengths survey

Table 1. A comparative analysis of the didactic components and exercises shared between MBWE and first-generation mindfulness-based programs (MBPs), highlighting both their similarities and differences. Excerpt taken from Kathirasan and Rai[10].

	Same as first-generation MBPs	Different from first-generation MBPs
Mindfulness practices (formal and informal)	Body scan	Mindful perception
	Awareness of breath	Gratitude practice
	Sitting meditation	Pro-social gratitude practice
	Mindful movement (mindful hatha, mindful stretching)	Sitting with a metaphor
	Coping breathing space (breathing space)	Mindful eating
	Mindful walking	
	Raisin practice	
	Lovingkindess meditation	

Table 2. A comparison of mindfulness practices in MBWE, highlighting the practices that are either similar to or distinct from those in first-generation mindfulness-based programs (MBPs). Excerpt from Kathirasan and Rai[10].

This study aimed to provide preliminary evidence of MBWE's capacity to promote human flourishing across individuals, irrespective of their current wellbeing status. While the primary focus of MBWE is the enhancement of overall wellbeing and the fostering of human flourishing, the findings suggest that the program may also have the potential to reduce stress, anxiety, and depression, despite these not being the primary objectives. These results highlight the need for further research into the broader mental health benefits of MBWE, extending beyond its intended focus on positive psychological outcomes.

Study 1

Aims and Hypotheses

This study aimed to evaluate the effects of the MBWE program on enhancing mindfulness among participants. Mindfulness was assessed using the Five Facet Mindfulness Questionnaire (FFMQ)[32], administered at both the onset and conclusion of the program. It was hypothesized that participants would exhibit increases in mindfulness scores following completion of the MBWE program, thereby reflecting the program's effectiveness in cultivating mindfulness.

Methods

A quasi-experimental design method was employed in this study. Participants who enrolled in and completed the 8-week MBWE program, delivered in-person, and provided a valid data set were included in the analysis. The data was collected in Singapore. The dependent variables were measured using the pre- and post-program Five Facet Mindfulness Questionnaire (FFMQ), which generated five mindfulness-related measurements for each participant based on their responses at the beginning and conclusion of the program. This was evaluated to be a sufficient method of data collection, as self-report measures have been demonstrated to be effective for evaluating mindfulness[33].

Participants and Recruitment

A convenience recruitment strategy was employed for the MBWE program, as participation was open to all individuals interested in enrolling, with participants responsible for their own enrolment fees. Potential participants were likely attracted to the program through various channels, including social media, in-person seminars, and online information available on the Centre for Mindfulness (Singapore) website. An intake process was conducted to screen out individuals unlikely to benefit from the program, ensuring suitability for participation. The following exclusion criteria were applied[10]:

- Compromised level of psychological safety in a group
- Active substance dependence
- Experienced mindfulness practitioner
- Not proficient in the language of delivery
- Issues that may create challenges when physically in the room
- Inability to attend all the sessions (up to two absences permitted)
- Brain injury or damage
- Recent loss, bereavement, or crisis
- Severe anxiety
- Currently receiving psychological therapy
- Current or past psychosis
- Risk of suicide
- Trauma
- Depression

For participants who disclosed conditions such as severe anxiety, ongoing psychological therapy, current or past psychosis, suicide risk, trauma, or depression, written permission from the individual's mental health provider was required to proceed with enrolment. Participants provided informed consent, agreeing to waive any rights to the submitted data while ensuring their anonymity. They were assured that their names would not be disclosed and that evaluations and results would be published without revealing their identities.

FFMQ data were collected from participants who responded to the invitation and attended at least 7 out of the 9 sessions. Following these criteria, 50 participants were deemed eligible to be included in the study. No comparison group was utilized in this study. In line with the specific goals of MBWE, demographic details and participants' medical histories were not included. Data collection occurred over approximately 3.5 years, from August 2017 to January 2021. The total number of participants per year, the count of cohort groups, and the mode of delivery are shown in Table 3.

Year	Mode of Delivery	Number of Cohort Groups	Number of MBWE participants
2017	In-Person	1	7
2018	In-Person	2	18
2019	In-Person	3	6
2020	In-Person	2	17
2021	In-Person	1	2

Table 3. *MBWE Participant Overview for Study 1.*

Measurements

This study utilized a single measurement tool: the Five Facet Mindfulness Questionnaire (FFMQ). The FFMQ is widely recognized as one of the most commonly used instruments in mindfulness research[32][34] and is considered a reliable measure of various dimensions of mindfulness[35]. It is applicable in studies investigating both mindfulness-based programs (MBPs) and general mindfulness assessments. The FFMQ consists of 39 Likert scale items designed to assess mindfulness across five core dimensions: observing, describing, acting with awareness, nonjudging, and nonreactivity to inner experience.

Each item presents a scenario or feeling commonly encountered in daily life, with participants rating their responses on a 5-point scale, where 1 = "never or rarely true," 2 = "rarely true," 3 = "sometimes true," 4 = "often true," and 5 = "very often or always true." Examples of items for each of the five dimensions are provided in Table 4. Participants completed the FFMQ twice: once prior to starting the MBWE program and again upon completion. This allowed for a quantitative evaluation of changes in mindfulness over the course of the program.

Category measured	Sample question
Observing	"When I am walking, I deliberately notice the sensations of my body moving.
Describing	I am good at finding words to describe my feelings.
Acting with awareness	When I do things, my mind wanders off and I am easily distracted.
Being nonjudging	I criticize myself for having irrational or inappropriate emotions
Non-reactive to inner experience	I perceive my feelings and emotions without having to react to them

Table 4. Samples of questions from the Five Facet Mindfulness Questionnaire (FFMQ), along with the corresponding mindfulness category they measure.

Missing Values

Incomplete data were obtained from four participants (12.5%) due to the absence of either pre-MBWE or post-MBWE FFMQ responses. Consequently, these participants were excluded from the final analysis, resulting in a reduced total sample size of 46.

Analytical Method

The pre- and post-MBWE FFMQ scores were compiled, and the five mindfulness categories were calculated for each participant in accordance with the FFMQ scoring guidelines. Mean scores for each category were computed for both the pre- and post-MBWE periods to evaluate changes in mindfulness levels. Paired t-tests were conducted for each category to assess the statistical significance of the observed changes, with a 95% confidence level. Data analysis was performed using Microsoft Excel version 2408.

Results

The findings indicate a positive correlation between participation in the MBWE program and increased mindfulness. Table 5 presents the mean scores from the pre- and post-MBWE FFMQ assessments, along with the corresponding p-values. The data demonstrate a significant increase in mindfulness across all five categories, suggesting that the MBWE program may have the potential to effectively enhance mindfulness skills. Paired t-tests conducted at a 95% confidence level ($p < 0.05$) confirmed the statistical significance of these improvements in mindfulness. The critical t-value at a 95% confidence level with 45 degrees of freedom was calculated to be 2.014. All of the values in table 5 exceeded the critical t-value, further validating the statistical significance of the results.

FFMQ score total	Pre mean	Post mean	Calculated p-value	Calculated t-value
Observing	25.8696	29.9348	3.15492E-05	4.461489834
Describing	24.1957	26.8913	1.99247E-06	5.30797829
Acting with awareness	17.3261	21.4783	5.32784E-07	5.702293423
Nonjudging	16.5000	21.7174	5.30352E-09	7.065470132
Nonreactivity	21.1304	25.0217	5.13213E-06	5.021958592

Table 5. Means obtained from pre- and post-MBWE FFMQ, with p-values and t-values from the paired t-test. (N=46)

Discussion

As hypothesized, the results from the FFMQ revealed statistically significant increases across all five facets of mindfulness, indicating that the MBWE program effectively enhanced mindfulness in participants. These findings are consistent with those reported in similar studies on 8-week MBSR/MBCT programs[36] [37], which employed more advanced tools, such as seed-based functional connectivity mapping and event-related potential graphs, to provide in-depth analyses. Although this study relied solely on the FFMQ, the alignment of its results with these more technologically advanced studies underscores the efficacy of mindfulness-based programs, with both showing strong statistical significance in increasing mindfulness.

The impact of these interventions can be further assessed by comparing FFMQ results across studies. Incagli et al.[36] reported significant improvements in mindfulness with MBSR ($p < 0.001$), which parallels the findings of this study ($p < 0.05$). Similarly, both studies observed increases across all FFMQ categories among participants. Guu et al.[37] also reported highly significant outcomes ($p < 0.001$), and the MBWE study demonstrated comparable results, with all FFMQ categories showing an average increase of over 4 points post-intervention.

These findings highlight the efficacy of the MBWE program, demonstrating its ability to achieve results comparable to first-generation MBPs. This reinforces its potential to enhance mindfulness and contribute to overall wellbeing.

Study 2

Aims and Hypotheses

The aim of this study was to evaluate the effectiveness of the MBWE program in promoting human flourishing among participants. Upon completion of the MBWE course, participants were invited to complete a brief survey to assess their experiences and perceived changes in wellbeing. It was hypothesized that participants would report positive improvements in their overall wellbeing as a result of the program.

Methods

Similar to Study 1, a quasi-experimental design was implemented, as the MBWE program, whether conducted in-person or virtually, was open to all participants who attended at least 7 out of the 9 sessions. Due to the COVID-19 pandemic, many sessions were delivered online to accommodate public health guidelines. Additionally, a portion of sessions were offered in a hybrid format, allowing participants the flexibility to join either virtually or in-person. Since this study focused exclusively on post-MBWE data, there were no explicit dependent variables. Changes experienced by patients were measured solely through survey questions functioning as dependent variables. The study relied on self-report methods to assess outcomes, a widely accepted approach in mindfulness research due to the inherently subjective nature of human experiences[35]. Similarly to study 1, self-report measures were deemed to be sufficient for evaluating mindfulness, evidenced by[33]. Given the varied conceptualizations of mindfulness, the use of

subjective self-report methods is essential for capturing the complexities of participants' experiences[38]. Thus, the design of this study can be considered sufficient without the inclusion of additional measurement tools.

Participants and Recruitment

The recruitment method mirrored that of Study 1. All participants were admitted into the program following an intake process designed to screen out individuals unlikely to benefit from the MBWE program. Additionally, participants provided informed consent under the same conditions as Study 1. For this phase, a distinct group of 124 MBWE participants, distinct from those in Study 1 participated in the data collection survey. Although these participants did not complete the FFMQ, they engaged in the same MBWE curriculum, following an identical structure and content to that of the Study 1 cohort. Data were collected over a period of 2.75 years, spanning from August 2021 to May 2024. The total number of participants per year, the count of cohort groups, and the mode of delivery are shown in Table 6.

Year	Mode of Delivery	Number of Cohort Groups	Number of MBWE participants
2021	Virtual	4	19
2022	Virtual	5	22
2023	Virtual	2	7
2023	Hybrid	3	28
2024	Virtual	1	7
2024	Hybrid	7	41

Table 6. *MBWE Participant Overview for Study 2.*

Measurements

Measurements for this study were obtained using a self-developed questionnaire administered upon completion of the MBWE program. The purpose of the questionnaire was to gather participant feedback and assess the personal benefits derived from the program. While it is more common in mindfulness research to use standardized quantitative scales to evaluate statistical significance[39][40], this study opted for a qualitative approach. Quantitative methods can often oversimplify individual experiences[41], and considering the diverse ways mindfulness can affect participants, relying solely on such methods was deemed insufficient for capturing the full range of outcomes.

The questionnaire included two Likert-scale questions in which participants rated their satisfaction with the facilitators and evaluated the relevance and usefulness of the course in their lives. Additionally, a structured self-report item allowed participants to identify specific aspects of their lives that had been positively impacted by the program, with options such as reduced stress, reduced anxiety, improved self-awareness, increased happiness, and discovering a deeper sense of meaning in life.

Finally, two open-ended questions were included to invite participants to share personal reflections on their experiences with the MBWE course, offering deeper insight into the program's impact. Table 7 provides a detailed description of each question asked in the questionnaire.

Question number	Question asked	Category of question	Aim of question
1	How relevant and helpful do you think this Course was for your life?	Likert-scale question.	Assessing the overall positive outcomes of the MBWE program
2	Please select the aspects of your life where you feel positively impacted:	Tick all answers that apply (5 options were provided).	Assessing the specific positive outcomes of the MBWE program
3	Please describe other aspects of your life where you had experienced increased levels of wellbeing:	Open ended question, requiring a written answer.	Assessing the unique positive outcomes of the MBWE program
4	What were your key take aways/learnings from this Course?	Open ended question, requiring a written answer.	Encouraging self-reflection from participants.
5	How satisfied were you with the Facilitator(s)?	Likert-scale question.	Gather feedback on the quality of the sessions delivered
6	Any other comments:	Optional question for participants to answer.	Allowing participants to provide their own unique feedback on the MBWE programme.
7	Participant name:	Optional question for participants to answer.	N/A

Table 7. *A detailed view of the self-developed MBWE questionnaire used in study 2. The specific aims of each question have also been described.*

These questions aimed to capture the broader and more subjective outcomes of the program that may not have been fully reflected in the quantitative data.

Analytical Method

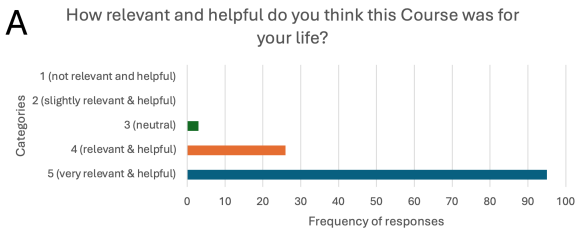
No advanced analytical techniques were employed in this study, the data has been described via appropriate graphs and descriptive statistics. Responses to the two quantitative Likert-scale questions were aggregated and presented graphically for ease of interpretation. The open-ended responses were analysed using qualitative methods, where recurring themes and patterns were identified by hand and visually represented in Figures 2 and 3. No specific criteria was used to fit answers into each category; answers were placed into categories manually and then reviewed by the authors to ensure each category accurately reflected the corresponding answers. This thematic analysis offered a deeper understanding of participants' experiences and highlighted the key takeaways from the MBWE program.

Results

Figure 1 illustrates the frequency of responses to the two Likert-scale questions included in the survey, revealing overwhelmingly positive feedback for the MBWE program. Fewer than five respondents provided neutral responses regarding the program's relevance and usefulness, while 96% indicated that the program was beneficial to varying degrees. The majority of participants also expressed high levels of satisfaction with the facilitators, suggesting that the sessions were well-organized, engaging, and met participants' expectations. Notably, none of the respondents reported that the program or its facilitators fell short of expectations.

Table 8 presents the specific benefits participants reported gaining from the MBWE program, with all respondents selecting at least one positive outcome. This finding suggests that MBWE's impact can span a broad demographic, offering benefits to participants regardless of their mental health history or background.

The responses to the open-ended questions were similarly positive, with participants praising the facilitators and reporting improvements in their overall wellbeing. The detailed feedback allowed for the identification of common themes, visually represented in Figures 2 and 3. These findings are consistent with similar studies, such as Moss et al. [42], further validating the positive outcomes associated with the MBWE program.



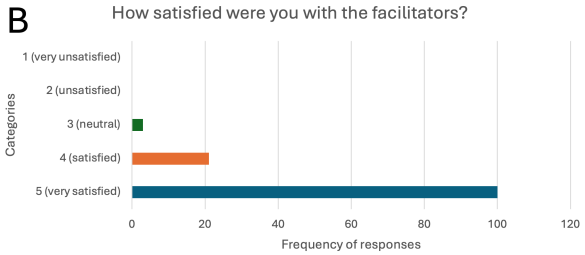


Figure 1. Graphs (A) and (B) presenting data obtained from the Likert-scale questions on the post-MBWE questionnaire (N=124).

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Effect of MBWE programme	Number of responses	Number of responses % (N)
Reduced stress	60	48.4
Reduced anxiety	66	53.2
Improved self-awareness	115	92.7
Increased happiness levels	57	46.0
Discovered deeper meaning to life	68	54.8

Table 8. The effect of the MBWE program on participants' mental wellbeing (N=124).

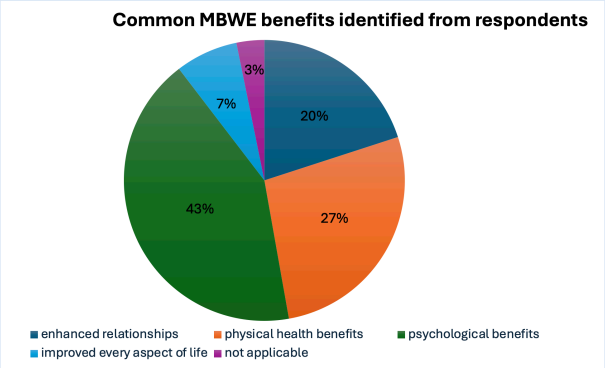

Figure 2. Common themes of responses to the question, "Please describe other aspects of your life where you experienced increased levels of wellbeing due to this mindfulness course." The proportion of each theme is displayed within the corresponding sections of the chart (N=124).

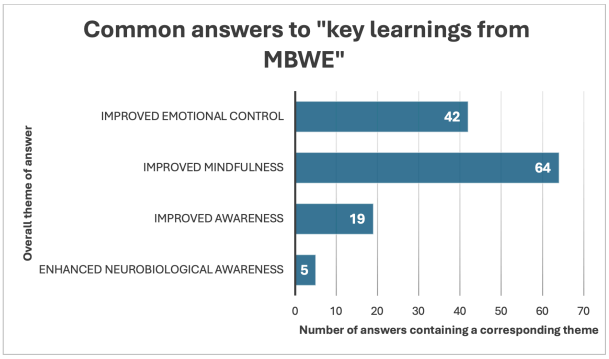

Figure 3. Common themes identified in responses to the question, "What were your key takeaways/learnings from this course?" Responses have been categorized into four main themes, with some answers overlapping across multiple themes (N=124).

Discussion

Table 8 highlights the specific benefits participants reported after completing the MBWE program. Notably, all respondents identified at least one positive outcome, with 92% reporting heightened self-awareness, 54.8% discovering a deeper sense of meaning in life, and 53.2% experiencing reduced anxiety levels. These outcomes underscore MBWE's capacity to promote human flourishing, with the vast majority of participants experiencing increased life satisfaction and meaningful personal growth. Additionally, the program effectively addressed mental health concerns, including reductions in stress and anxiety, aligning with findings from other mindfulness-based programs like Mindfulness-Based Stress Reduction (MBSR)[43][44].

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Physical health benefits were also reported by several participants, such as improved sleep and stabilized blood pressure (Figure 2). The largest group, 43%, experienced psychological benefits, reinforcing the program's success in enhancing mental health and emotional wellbeing. Furthermore, 27% of participants reported physical health improvements, which corroborates existing research linking mindfulness practices to better sleep, reduced blood pressure, and decreased physical tension—often as a secondary effect of improved psychological wellbeing. Additionally, 20% of participants experienced enhanced relationships, indicating that mindfulness fosters better interpersonal connections through improved empathy, communication, and emotional regulation. Overall, these results suggest that MBWE positively impacts not only mental health but also physical wellbeing, and social relationships. These outcomes are consistent with studies demonstrating MBSR's efficacy in managing chronic pain[45] and cardiovascular conditions[46]. Although MBWE did not include specific quantitative measures for stress or anxiety, its potential to replicate MBSR's physical health benefits is evident, and further research is needed to precisely quantify these effects.

There is also substantial evidence supporting the effectiveness of Mindfulness-Based Cognitive Therapy (MBCT) in treating anxiety and depressive disorders, with Cladder-Micus et al.[47] reporting that MBCT's benefits persisted for up to six months post-intervention. The data from Table 8 indicate that MBWE may hold similar potential, as 46% of respondents reported increased happiness. While MBCT remains the more established intervention for treating such disorders, MBWE offers a broader focus on fostering human flourishing and overall wellbeing, suggesting that it could achieve comparable mental health outcomes while also promoting holistic development.

Figure 3 provides further insights into the key learnings reported by participants. The most commonly identified learning was "Improved Mindfulness," with 64 participants citing this as a significant takeaway. This finding underscores MBWE's success in cultivating mindfulness, which is the central aim of mindfulness-based programs—helping participants develop sustained present-moment awareness and integrate mindfulness into their daily lives.

"Improved Emotional Control" was the second most frequently reported theme, cited by 42 participants. This reflects mindfulness's role in fostering emotional regulation, a crucial skill for managing stress, anxiety, and other emotional challenges. Participants noted that the ability to regulate their emotions enabled them to respond to life's difficulties with greater composure and less reactivity.

A smaller but significant portion of participants (19) reported "Improved Awareness," highlighting the enhanced self-awareness that mindfulness practice cultivates. This suggests that MBWE effectively fosters greater self-understanding, a key element in personal growth and flourishing. Finally, "Enhanced Neurobiological Awareness" was the least commonly reported learning, with only 5 participants identifying this as a key takeaway. While mindfulness programs typically emphasize psychological and emotional benefits, this finding suggests that some participants gained insights into how mindfulness affects biological processes such as stress responses and physical health.

Limitations and Methodological issues

The 8-week MBWE program likely represented the first exposure to mindfulness for many participants, potentially limiting the extent to which the results reflect the full potential of mindfulness meditation. Extending mindfulness practices beyond the 8-week timeframe could yield more substantial effects, as the current duration may be insufficient to fully assess complex outcomes, such as discovering deeper meaning in life—an intricate concept shaped by cognitive and intellectual factors. Future studies would benefit from follow-up assessments to track long-term human flourishing outcomes. Furthermore, larger sample sizes should be used in future MBWE research to reduce the impact of potential response bias on the results. A parallel can be drawn to the secondary analysis of MBSR/MBCT graduates conducted by Maloney et al.[48], which examined post-completion changes in mental wellbeing.

Given the timeframe of this research, it is important to consider the potential impact of the COVID-19 outbreak on the results. During this time, participants were living under drastically different conditions due to the disruption of daily life as a result of the outbreak. Consequently, this could have led to a reduction in the mental wellbeing of these participants, potentially skewing the results of the MBWE programme as it may have appealed to more

participants given the conditions at the time. Furthermore, without having in-person sessions, accurate data on certain questions such as "How satisfied were you with the Facilitator(s)?" cannot be collected, as evidence suggests that face-to-face communication can be more effective than digital communication in the context of mental health[49]. 21 individuals participated in study 1 during the COVID-19 timeframe (2020-2021) and a reasonable estimate of 30 can be drawn for study 2 (2021-2022). No outliers were detected in both the FFMQ or the questionnaire when analysing data from these periods, suggesting that the COVID-19 outbreak had a negligible impact on the findings.

To improve the rigour of future MBWE research, it is essential to include a control group, which would allow for clearer attribution of mindfulness improvements to the program itself, rather than to external variables. The inclusion of a control group would strengthen the evidence that MBWE is directly responsible for the observed enhancements in mindfulness and wellbeing, allowing for a definitive conclusion to be reached.

In contrast, contemporary research on first-generation MBPs, such as MBSR and MBCT, often narrows its sample by focusing on individuals with specific mental health conditions through strict inclusion and exclusion criteria. While this approach ensures consistency in findings, it may introduce methodological issues such as small sample sizes and selection biases, which can limit the statistical significance of the outcomes[50]. With a small sample size such as in study 1, small differences in FFMQ data can drastically affect the evaluation of results[51]. The MBWE program, being open to all participants, introduces greater variability in the data, which poses challenges in outcome analysis. While this inclusivity is a strength in promoting mindfulness to a broader audience, it also presents analytical difficulties, as higher variance in the data may skew results. Moreover, given that MBWE is a relatively new intervention, the absence of prior studies for comparison limits the external validation of the current findings. Regular evaluations in future studies are necessary to maximize data collection and ensure replicability.

Additionally, it would be advantageous for future studies to have all participants complete both the pre- and post-MBWE FFMQ, along with the post-MBWE survey, to create a more cohesive dataset that links quantitative and qualitative outcomes. Some participants may express themselves more effectively in open-ended survey questions, while others may benefit from the structured nature of the FFMQ, which covers a broader range of topics. In this study, separate participant groups completed the FFMQ and the survey, preventing direct comparison of the two data types.

A potential source of bias may stem from participants' preferences for particular mindfulness instructors, which could have influenced their experiences with the program. However, since nearly all participants reported at least one significant benefit from MBWE, this bias likely had minimal impact on the overall results. Nevertheless, this potential bias should be considered in future studies.

Additionally, the enrolment fee for the MBWE program may have limited participation to a particular demographic, potentially excluding those unable or unwilling to pay. Future research should consider this factor and explore options to make the program accessible to a broader population.

Finally, incorporating additional quantitative measures, such as the Psychological Wellbeing Scale[52], to assess wellbeing levels pre- and post-program, would offer a more objective evaluation of participants' overall psychological wellbeing. This approach would provide deeper insights into the statistical significance of changes in areas such as self-acceptance, autonomy, and personal growth, thereby enhancing the ability to evaluate the program's effectiveness in promoting comprehensive psychological wellbeing. The current data, as shown in Table 5, may exhibit high individual variability due to psychological factors such as the placebo effect, complicating the ability to draw definitive conclusions. Furthermore, utilising quantitative methods in study 2 would have allowed for the measurement of stress, anxiety and depression with validated scales rather than short qualitative questions, significantly increasing the reliability of the data. One improvement would be to familiarize participants with the quantitative measures prior to the start of the program, thereby reducing potential self-report biases, such as social desirability bias, which can distort the accuracy of self-assessments[53].

Conclusion

This study aimed to evaluate the effects of the MBWE program on enhancing mindfulness and promoting human flourishing among participants, incorporating

both qualitative and quantitative methods to assess its effectiveness. The findings from both studies highlight the program's effectiveness in improving psychological wellbeing, reducing anxiety and stress, and fostering a deeper sense of self-awareness and life meaning. Notably, the program's inclusive approach allows individuals to benefit from the interventions, suggesting broad applicability. This is reflected in the positive reception to the MBWE programme from participants, as 96% of participants perceived the course to be beneficial.

While the results indicate strong positive outcomes, future studies should aim to incorporate control groups, longer follow-up periods, and additional quantitative assessments to provide a more comprehensive evaluation of MBWE's effectiveness. Despite these limitations, the MBWE program shows substantial potential not only in addressing mental health concerns but also in fostering holistic wellbeing and human flourishing, marking it as a valuable second-generation mindfulness-based program for a broad range of individuals.

Statements and Declarations

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Conflicts of Interest

Sufian Chughtai declares no conflicts of interest. Kathirasan K, the principal developer of the MBWE, and Sunita Rai, the co-developer, have a financial interest in the MBWE program, which may be influenced by the findings presented in this paper.

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