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Abstract

Healthcare professionals, including occupational therapy practitioners, are experiencing epidemic levels of burnout. Professional organizations have prioritized research and programming to address burnout. This study evaluated the feasibility of an evidence-based virtual mindfulness continuing education program, Mindfulness at Work, and the mindfulness strategies participants learned and embedded into their workday. This program was developed and facilitated by an occupational therapist who is also a registered advanced yoga teacher. A total of 11 occupational therapy practitioners experiencing burnout met with the facilitator for once-weekly synchronous sessions over three weeks. OT practitioners were taught mindfulness strategies to use throughout their workday. Participants practiced the strategies at work between sessions and discussed their experiences during subsequent sessions. Aspects of the feasibility of both the program and the mindfulness strategies were measured post-only. Participant burnout was measured pre and post. Participants rated the virtual mindfulness continuing education program and mindfulness strategies as acceptable, appropriate, and feasible. There were significant decreases in pre- and post-test burnout scores during this preliminary evaluation. Attendance and retention rates were high. Eligibility criteria challenged recruitment capability.

Keywords

Clinician well-being, job burnout, feasibility

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Feasibility of Mindfulness at Work: A Continuing Education Program for Occupational Therapy Practitioners Experiencing Burnout

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ABSTRACT

Healthcare professionals, including occupational therapy practitioners, are experiencing epidemic levels of burnout. Professional organizations have prioritized research and programming to address burnout. This study evaluated the feasibility of an evidence-based virtual mindfulness continuing education program, Mindfulness at Work, and the mindfulness strategies participants learned and embedded into their workday. This program was developed and facilitated by an occupational therapist who is also a registered advanced yoga teacher. A total of 11 occupational therapy practitioners experiencing burnout met with the facilitator for once-weekly synchronous sessions over three weeks. OT practitioners were taught mindfulness strategies to use throughout their workday. Participants practiced the strategies at work between sessions and discussed their experiences during subsequent sessions. Aspects of the feasibility of both the program and the mindfulness strategies were measured post-only. Participant burnout was measured pre and post. Participants rated the virtual mindfulness continuing education program and mindfulness strategies as acceptable, appropriate, and feasible. There were significant decreases in pre- and post-test burnout scores during this preliminary evaluation. Attendance and retention rates were high. Eligibility criteria challenged recruitment capability.

Introduction

Healthcare practitioners (HCPs), including occupational therapy practitioners (OTPs), face a significant risk of experiencing job burnout (DeHert, 2020; Poulsen et al., 2014). The World Health Organization (WHO) characterizes job burnout as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed" (WHO, 2019, para. 4). This definition emphasizes the persistent nature of stress as a critical factor in burnout. Healthcare practitioners experiencing burnout face a higher risk of physical and mental conditions, including high blood pressure, heart disease, anxiety, and depression (Garcia et al., 2019; Luken & Sammons, 2016; Poulsen et al., 2014).

Burnout among OTPs is associated with increased absenteeism and cynicism and decreased job performance and client engagement (Brown & Pashniak, 2018; Zeman & Harvison, 2017). The repercussions of burnout extend beyond the practitioners' well-being and can adversely affect client outcomes (Brown & Pashniak, 2018; Garcia et al., 2019). WHO and the American Occupational Therapy Association (AOTA) recognize the prevalence and prioritize research and programming to address job burnout (AOTA, 2021; WHO, 2019). Their efforts reflect a commitment to promoting the health and well-being of clinicians and maintaining the overall quality of client care.

Mindfulness

A promising, evidence-based approach to reducing job burnout in HCPs is mindfulness (Burton et al., 2017). Mindfulness involves "paying attention in a particular way, on purpose, in the present moment, and in a non-judgmental way" (Kabat-Zinn, 1994, p. 4). In other words, mindfulness is a deliberate shift from a cognitive state of little self-awareness to fully engaging with one's present experience. It entails being fully aware of and engaged in the present, paying close attention to thoughts, emotions, bodily sensations, and the environment (Kabat-Zinn, 1994). By developing mindful awareness, OTPs can cultivate a deeper understanding of themselves and their surroundings, leading to greater clarity around the causes and responses to persistent work-related stress.

People often describe mindfulness in association with meditation and use the terms interchangeably; however, they are distinct concepts. Individuals can achieve a state of mindfulness at any time and place through an intentional shift in awareness (Kabat-Zinn, 1994). Meditation refers to specific techniques used to cultivate mindfulness. Mindfulness, by definition, does not involve a single procedure or method; therefore, meditation is not required to practice mindfulness (Reid, 2013). Mindfulness practices integrated into daily activities may be more sustainable and practical for individuals experiencing burnout than formal meditation practices (Goodman et al., 2019; Reid, 2013).

Researchers have established the efficacy of traditional, mindfulness-based stress reduction (MBSR) programs for decreasing job burnout in healthcare professionals (Burton et al., 2017; Luken & Sammons, 2016). While there is strong evidence for the efficacy of MBSR programs, the programs are time-intensive (Burton et al., 2017).

Traditional MBSR programs occur over eight weeks, with weekly sessions lasting 2.5 to 3 hours, an additional 45-60 minutes of daily meditation, and a 7-8 hour all-day intensive (Institute for Mindfulness-Based Approaches, 2023). This time commitment is often restrictive for professionals who are experiencing burnout (Burton et al., 2017). Researchers have developed virtual mindfulness programs in response to the growing demand for convenient access to mindfulness programs. Reid (2013) piloted a traditional MBSR program virtually with occupational therapy (OT) students and found that online delivery of MBSR can be a viable approach. Hoover et al. (2022) evaluated the efficacy of delivering a brief mindfulness program in person and virtually with physician assistant students. Their findings indicated that virtual mindfulness programs could be equally effective as in-person sessions. Nourian et al. (2021) demonstrated the positive impacts of a virtual MBSR program with nurses working in COVID-19 intensive care units.

This study examined the feasibility of the Mindfulness at Work program, which offers a distinctive virtual continuing education (CE) opportunity tailored for OTPs (occupational therapists and occupational therapy assistants). The primary author designed Mindfulness at Work to enhance feasibility for OTPs experiencing burnout by minimizing the time burden of participating while adhering to key mindfulness principles. This virtual CE program enabled participants to integrate the learned mindfulness strategies into their everyday work routines without requiring formal meditation practice. The virtual format aimed to enhance convenience, allowing participation from any location.

Purpose and Aims

As outlined by Orsmond and Cohn (2015), feasibility studies aim to: (a) evaluate recruitment capability and resulting sample characteristics, (b) evaluate and refine data collection procedures and outcome measures, (c) evaluate the acceptability and suitability of the intervention and study procedures, (d) evaluate available resources and the research team's ability to manage and implement the study and intervention, and (e) provide a preliminary evaluation of participant responses to intervention.

We chose to evaluate three aspects of the feasibility of Mindfulness at Work and the embedded mindfulness strategies: (a) recruitment capability and resulting sample characteristics, (b) acceptability and suitability of the intervention and study procedures, and (c) preliminary evaluation of participant responses to intervention. We prioritized these aspects as most relevant for this initial feasibility assessment.

Methods

Program Description

Mindfulness at Work is a three-week virtual mindfulness CE program during which OTPs learn evidence-based mindfulness strategies to embed during their workday. The program was launched from a Google Classroom (<https://classroom.google.com/>) platform and included synchronous and asynchronous learning activities. Participants met weekly for a synchronous 75-minute Zoom (<https://zoom.us/>) session. An occupational therapist, who was also a registered advanced yoga teacher, facilitated the synchronous sessions. These sessions included a welcome from the facilitator, a brief

reflection activity, instruction in and practice of a mindfulness strategy, questions and discussion, and a conclusion. Participants practiced learned strategies between sessions. During follow-up Zoom sessions, participants had an opportunity to report their experience in using the mindfulness strategies. Between Zoom sessions, participants had access to the Google Classroom, where they could ask the facilitator questions; share their experiences; and access additional resources, optional readings, and guided meditations. Participants received daily email reminders to use mindfulness strategies during work (see curriculum description in Appendix A).

Study Design

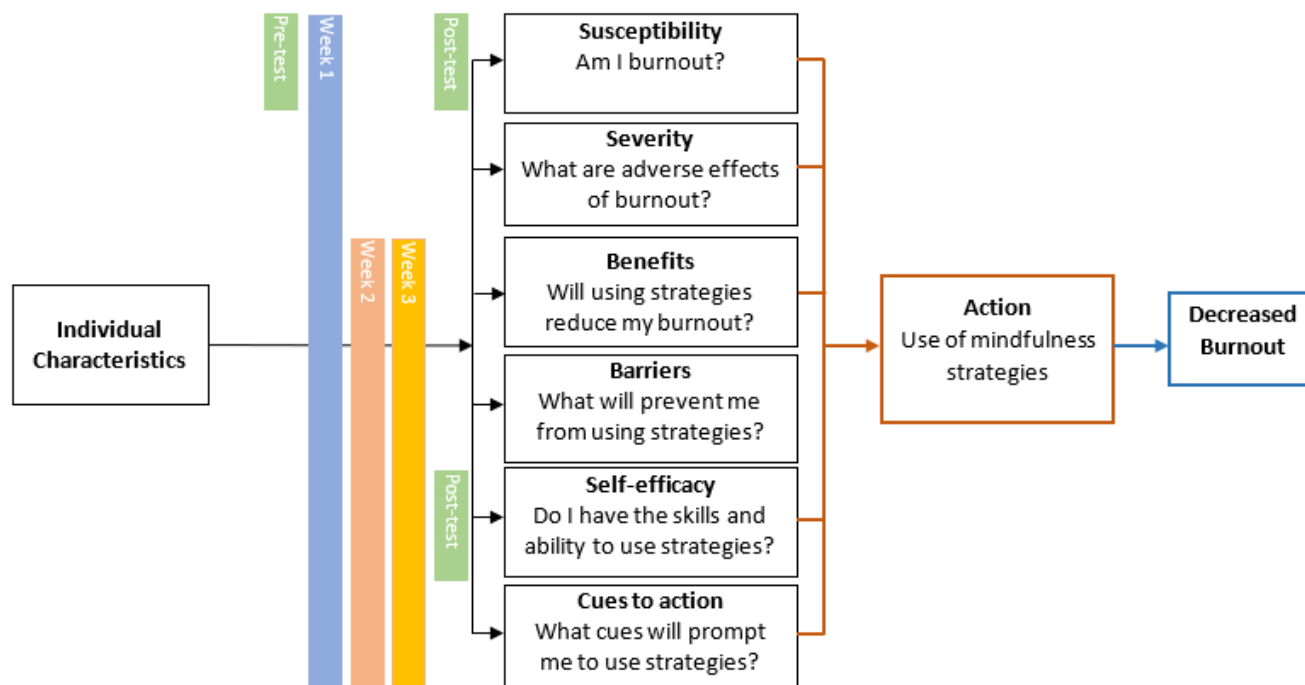
This feasibility study used a single-group design with a total of 11 eligible participants distributed across three cohorts. A pre-and post-test measured burnout levels, and a post-test-only design measured aspects of feasibility, including acceptability, appropriateness, and feasibility of the program and mindfulness strategies. We tracked recruitment data and the attendance of participants. The Institutional Review Board of Thomas Jefferson University approved this study.

Conceptual Framework

The Health Belief Model (HBM) was used to guide program development. The HBM identifies six primary constructs that influence and predict actions associated with positive health behaviors (Champion & Skinner, 2008). Figure 1 illustrates how each HBM construct was employed to increase the likelihood of participants using mindfulness strategies at work.

Figure 1

The Health Belief Model and Mindfulness at Work



Participants

The authors recruited OTPs through OT-related professional organizations and social media groups and an email campaign advertising the program through the authors' professional networks. Eligible respondents met the following criteria: registered occupational therapists or occupational therapy assistants with at least one year of professional experience, English speaking, available to participate in the 3-week program, and scores of 44 (moderate burnout) or higher on the Oldenburg Burnout Inventory (OLBI). The researchers excluded respondents with formal mindfulness training or an OLBI score of 43 or lower from this study.

Feasibility Outcomes

Recruitment Capability

We analyzed data from the screening surveys that respondents completed during the recruitment phase to assess recruitment capability.

Acceptability and Suitability of the Intervention and Study Procedures

We used three implementation outcome indicators developed by Weiner et al. (2017) to assess the acceptability, appropriateness, and feasibility of Mindfulness at Work and the embedded mindfulness strategies: the Acceptability of Intervention Measure (AIM), Intervention Appropriateness Measure (IAM), and Feasibility of Intervention Measure (FIM).

Acceptability relates to the participant's perception of the intervention as satisfactory (Proctor et al., 2011). Appropriateness examines whether participants perceive the intervention as a good fit, relevant, and applicable to their situations and experiences (Proctor et al., 2011). Feasibility assesses whether participants find the intervention possible and easy to use within their given circumstances (Proctor et al., 2011).

Each measure contains four items with questions specific to its respective construct. Participants rate each item using a five-point Likert scale: 1 (completely disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), and 5 (completely agree). Scores on each measure are calculated and averaged (Impact Center, n.d.). Participants completed the feasibility measures for both the program and strategies at the end of the third synchronous session.

The AIM, IAM, and FIM are psychometrically strong (Weiner et al., 2017). All three measures have demonstrated internal consistency, content validity, test-retest reliability, and construct validity (Weiner et al., 2017).

We tracked retention rates by keeping an attendance log of each synchronous session. We calculated the average of this data to provide additional insight into the program's feasibility for OTPs experiencing burnout.

Preliminary Evaluation of Participant Responses to Intervention

We used the Oldenburg Burnout Inventory (OLBI) to assess whether the program and strategies show promise of being successful with OTPs experiencing burnout. The OLBI contains 16 items, rated using a four-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree; Demerouti et al., 2003). We add the scores from all 16 items to obtain a total score. Total scores are classified into three levels of burnout: <44 low, 44 – 59 moderate, and >59 high (Tipa et al., 2019).

The OLBI is a reliable and valid measure of burnout. It exhibits good construct validity (Halbesleben & Demerouti, 2005) and test-retest reliability (Demerouti et al., 2003). Additionally, the OLBI demonstrates satisfactory convergent validity, correlating positively with other established burnout measures (Demerouti et al., 2010).

Procedures

Occupational therapy practitioners interested in the CE program emailed the first author. Respondents received an email linked to a screening survey containing informed consent, demographic questions, and a pre-test OLBI. We invited eligible respondents to participate in the study and sent them a follow-up email with details on course access. Non-eligible respondents received a follow-up email notifying them of this status. After this study concluded, the first author informed non-eligible respondents of future opportunities to participate in the program.

One week before the program start date and the morning of each live session, participants received a reminder email with instructions for accessing course technology. Participants completed post-tests, including the OLBI and three feasibility measures, at the end of the third synchronous session.

Data Collection & Analysis

Respondents and participants completed screening surveys and post-tests online using secure and encrypted Qualtrics Survey Software (<https://www.qualtrics.com/>). The first author kept attendance logs for each session in a separate password-protected Excel spreadsheet. A statistician used descriptive statistics to analyze results for each feasibility measure (AIM, IAM, FIM), including group means and standard deviation.

We used a Wilcoxon signed-rank test to analyze pre- and post-OLBI scores. This non-parametric approach is suitable for paired analysis of ordinal data (Taylor, 2017). It does not rely on data distribution assumptions and is robust to violations of normality, allowing it to detect significant changes in OLBI scores within our small sample size.

Jones and Johnston (2011) emphasized the value of capturing real-time data to authentically portray participants' experiences as they occur instead of depending on retrospective data. To achieve this, the first author captured anecdotal data in real-time during the synchronous sessions by taking notes of participant comments in a written log. This data encompassed information regarding participants' practice settings and their casual comments on the program experience.

Findings

Recruitment Capability

A total of 30 OTPs responded to the recruitment flyer; 14 were eligible and invited to participate in the study. We excluded 16 respondents due to their lower-than-moderate burnout scores. Three eligible respondents withdrew from the study, leaving a sample size of 11. Table 1 presents participant demographic data.

Table 1

Participant Demographic Data (n=11)

Characteristic	N
Gender	
Female	11
Ethnicity	
Non-Hispanic	11
Race	
Black or African-American	1
White	9
White & Asian	1
Highest Education	
Bachelor's Degree	1
Master's Degree	10
Age	
25-34	5
35-44	3
45-54	3
Employment Status	
Full-time (40 or more hours per week)	10
Part-time (up to 39 hours per week)	1
Nationality	
American	8
Canadian	3

Acceptability and Suitability of the Intervention and Study Procedures

The mean scores on the feasibility measures were as follows: AIM (acceptability) = 4.7, IAM (appropriateness) = 4.6, and FIM (feasibility) = 4.6. The mean scores for the strategies used during work were as follows: AIM (acceptability) = 4.6, IAM (appropriateness) = 4.5, and FIM (feasibility) = 4.6. These scores meet the study criterion > 3. All participants rated the program and the use of the strategies at work as acceptable, appropriate, and feasible.

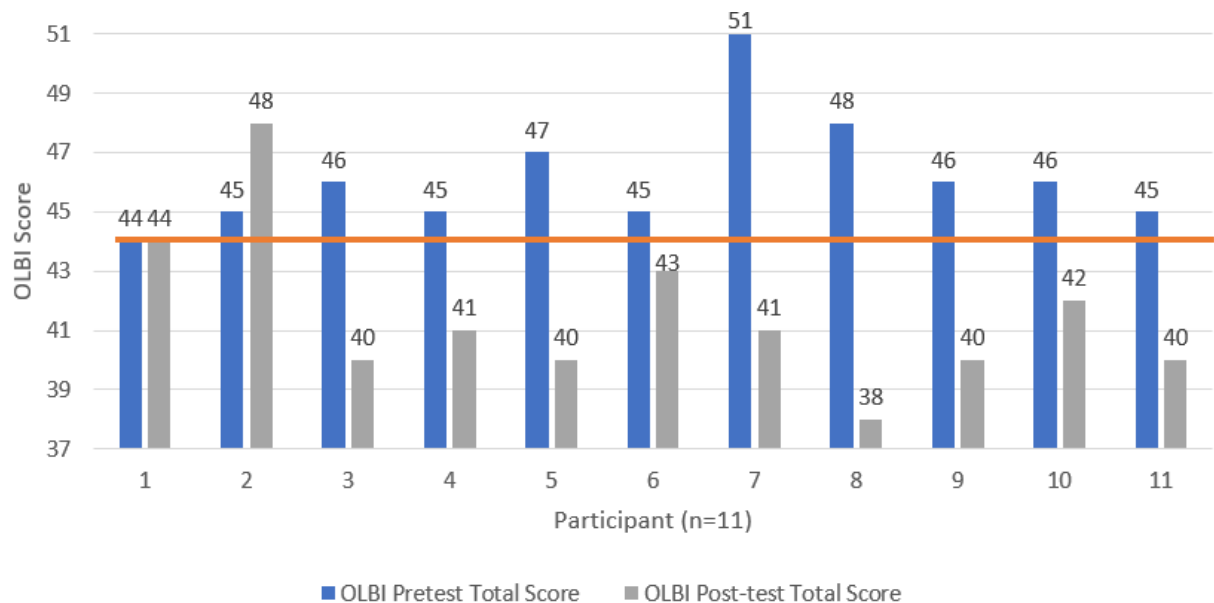
The average number of sessions attended by participants was 2.8 out of 3, indicating a high retention rate. All eleven participants attended the first two sessions; nine attended the third session. All participants completed pre- and post-tests.

Preliminary Evaluation of Participant Responses to Intervention

Using a Wilcoxon signed-rank test, the researchers detected changes in pre- and post-test OLBI scores that were statistically significant ($Z = -2.604$, $p = 0.009$) based on a standard alpha level of 0.05. Median OLBI scores were 46.0 before participating in Mindfulness at Work and 41.0 after the intervention. Nine of the eleven participants (82%) demonstrated decreased burnout levels from moderate to low. Figure 2 demonstrates the changes in pre- and post-test OLBI scores.

Figure 2

OLBI Pre- and Post-Test Scores



Note: The weighted horizontal orange line depicts the threshold for moderate burnout level, which is 44.

Discussion

There is a need for mindfulness programs that are time-efficient and tailored to OTPs (Luken & Sammons, 2016). Due to the prevalence of burnout in OTPs, research and initiatives addressing OTP burnout are a priority. A survey conducted before the COVID-19 pandemic revealed that OTPs frequently encountered burnout (Shin et al., 2022). Roundy et al. (2023) concluded that the COVID-19 pandemic likely exacerbated these feelings of burnout, emphasizing this study's timeliness.

The current study evaluated the feasibility of Mindfulness at Work, a virtual mindfulness CE program for OTPs experiencing burnout. The study also examined the feasibility of mindfulness strategies the participants learned during the program. The following discussion analyzes three aspects of feasibility (Orsmond & Cohn, 2015) prioritized in this initial study: (a) recruitment capability and resulting sample characteristics, (b) acceptability and suitability of the intervention and study procedures, and (c) preliminary evaluation of participant responses to intervention.

This study also adds to the existing literature exploring the utilization of virtual platforms for delivering CE content. Through their scoping review, Zhang and Thompson (2022) highlighted that virtual platforms conveniently and effectively deliver CE content for HCPs, improving knowledge acquisition and driving behavior changes that positively impact patient care. Similarly, Kim et al. (2022) demonstrated that web-based education could attain similar levels of knowledge acquisition as in-person education, specifically for OTPs. The results of the current study suggest that virtual platforms can be a viable and efficient way to deliver mindfulness training and other CE programming to OTPs.

Feasibility Outcomes

Recruitment Capability

Eligibility criteria challenged the recruitment capability of this study. Sixteen of 30 responding OTPs did not meet the inclusion criteria because their OLBI scores were lower than “moderate.” We considered adjusting the inclusion criteria by reducing the OLBI score threshold to enhance recruitment capability. We decided against this approach to maintain a sample the research community would acknowledge as representative of individuals experiencing burnout. Instead, we offered additional cohorts, for a total of three cohorts, over three months to augment the sample size.

Acceptability and Suitability of the Intervention and Study Procedures

The results of the current study indicate the intervention and study procedures were acceptable and suitable. Participating OTPs rated Mindfulness at Work and the embedded mindfulness strategies as feasible, acceptable, and appropriate. The perceived feasibility of the program and strategies support its potential for broader implementation among OTPs and potentially other related fields.

Retention rates were high for this study. Participants attended 2.8 out of 3 sessions, indicating that retaining OTPs experiencing burnout in the Mindfulness at Work CE program was feasible. Participating OTPs demonstrated their capacity to complete the intervention despite potential burnout-related challenges.

Preliminary Evaluation of Participant Responses to Intervention

The change observed in pre- and post-intervention OLBI scores suggests the program and strategies show promise for being successful with OTPs experiencing burnout. One participant experienced an increase in their OLBI score; however, it was not within the scope of this feasibility study to explore the factors underlying the outlier's contrasting response. The overall pattern of decreasing OLBI scores supports the need for a more controlled study design with a larger sample size to assess participant response to intervention and understand contextual factors impacting the burnout experience.

Additional Aspects of Feasibility

Retrospectively, we can comment on two remaining objectives of feasibility: (a) data collection procedures and outcome measures and (b) available resources and the research team's ability to manage and implement the study and intervention. The data collection procedures and the chosen outcome measure were appropriate in this initial feasibility study. The OLBI enabled us to quantify shifts in threshold burnout scores. However, it excluded individuals with burnout scores below the moderate range, although some might have derived benefits from the intervention.

A retrospective examination of our resources indicates we can leverage our expertise, skillset, and university resources to manage the study and intervention, even as we anticipate expanding to a larger participant group. The effectiveness of mindfulness-based interventions depends on the training and expertise of the person delivering the intervention. The primary author of this study is a certified advanced yoga teacher. Additionally, our approach benefits from minimal overhead, utilizing readily available tools such as Google Classroom and Zoom. We strictly adhered to IRB guidelines for this study and expect this to remain consistent in future studies. These considerations collectively contribute to the overall feasibility of this and future research.

Limitations

Feasibility studies have inherent limitations in demonstrating the efficacy of an intervention, such as the lack of a control group and limited sample size (Orsmond & Cohn, 2015). Although the changes observed in pre- and post-intervention OLBI scores support further investigation of Mindfulness at Work and the embedded mindfulness strategies among occupational therapy practitioners, the study does not provide a comprehensive understanding of the program's effectiveness and long-term sustainability. Additionally, the absence of substantive qualitative data restricts our understanding of participants' perspectives on the program and strategies.

There were also some limitations related to the recruitment process. One limitation was the exclusion of first-year practitioners, potentially overlooking the burnout experiences among this group. To measure the change in burnout within a small sample and over a short timeframe, we established a threshold of moderate burnout on the OLBI. This limited our capacity to capture change along the full spectrum of burnout that OTPs might experience. Broadening the burnout criterion could enhance recruitment capability and facilitate the exploration of the program's impact in a more inclusive sample of OTPs. It could also allow for the exploration of a wellness-focused program to mitigate burnout risks in OTPs.

Future Research

Future research could evaluate two additional aspects of feasibility described by Orsmond and Cohn (2015): (a) data collection procedures and outcome measures and (b) available resources and the research team's ability to manage and implement the study and intervention. For example, researchers could employ a variety of burnout metrics, including the Maslach Burnout Inventory, to capture various dimensions of burnout that a single measure could miss (Brady et al., 2022). Future studies could use

longitudinal studies to assess the sustained benefits of the CE program and strategies. Follow-up research could also evaluate program resources such as technology to record and store synchronous sessions to accommodate participants absent from the second or third session.

Future research could conduct a more extensive study with a larger sample size to help establish the efficacy of Mindfulness at Work and the learned mindfulness strategies. While the preliminary evaluation yielded encouraging results, the current study focused on feasibility. A larger-scale investigation involving a broader range of participants is required to assess the intervention's effectiveness.

Future studies could also integrate qualitative approaches to complement quantitative data. Incorporating qualitative methods such as interviews or open-ended survey questions could provide a more comprehensive assessment of the intervention's impact. Incorporating qualitative data could also offer insight into contextual factors that influence the participants' experience and levels of burnout.

Conducting long-term follow-up studies would provide insights into the long-term impact of participation in Mindfulness at Work. For example, future studies could investigate whether practitioners continue using mindfulness during everyday work routines. Additionally, examining whether the observed reductions in OLBI scores persist over an extended period would offer insights into the sustained benefits of the program.

Another possibility for future research is the comparative assessment of virtual platforms and traditional face-to-face courses when delivering mindfulness CE programming. Investigating the effectiveness and participant experiences across these two modes of instruction would contribute to a more comprehensive understanding of how best to deliver mindfulness CE programs to OTPs.

Implications for Occupational Therapy Education

Our findings suggest that OTPs could benefit from participating in this brief, virtual mindfulness CE program and incorporating the strategies into their workday. Elements of the Mindfulness at Work curriculum design may be useful to consider when designing similar CE programs. For example, we intentionally minimized the time burden and ease of access associated with program participation by offering brief, virtual synchronous sessions. Additionally, we provided education on tangible evidence-based mindfulness strategies that participants integrated into their daily work routines. These steps make a CE feasible for a practitioner and provide active learning through the actual use of the strategies in their professional environments.

Recommendations for occupational therapy education include employers offering mindfulness-based professional development opportunities to their current employees or as part of new employee orientation to foster a positive workplace culture. CE providers might also develop similar programs for OTPs to engage in voluntarily as part of their continuing education requirements. The results of the current study suggest that

virtual platforms can be a viable and efficient way to deliver mindfulness training and other CE programming to OTPs. A multifaceted approach ensures that current and future OTPs have various opportunities to access mindfulness programs tailored to their particular needs.

The current study also highlights the value of assessing feasibility when developing new CE programming. Conducting a feasibility study allows program developers to make informed decisions, anticipate challenges, refine the CE program, and maximize its potential for success. It serves as a vital step in the CE development process, helping ensure that the program is well-designed, feasible, and responsive to the target audience's needs.

Conclusions

The findings in this study have important implications for the occupational therapy profession. The results highlight the feasibility of this mindfulness-based approach, including positive preliminary outcomes. They also underscore the importance of continued research to understand better how individuals respond to mindfulness-based interventions and the subjective factors influencing the burnout experience of OTPs.

References

- Alidina, S. (2018, November 7). *Ten ways to be more mindful at work*. Mindful. <https://www.mindful.org/10-ways-mindful-work/>
- American Occupational Therapy Association. (2021). *Statement on clinician well-being and resilience*. https://nam.edu/wp-content/uploads/2021/04/AOTA_American-Occupational-Therapy-Association_Commitment-Statement-2021.pdf
- Brady, K. J. S., Ni, P., Carlasare, L., Shanafelt, T. D., Sinsky, C. A., Linzer, M., Stillman, M., & Trockel, M. T. (2022). Establishing crosswalks between common measures of burnout in US physicians. *Journal of General Internal Medicine*, 37(4), 777–784. <https://doi.org/10.1007/s11606-021-06661-4>
- Brown, C. A., & Pashniak, L. M. (2018). Psychological health and occupational therapists: Burnout, engagement and work addiction. *Work*, 60(4), 513–525. <https://doi.org/10.3233/WOR-182759>
- Burton, A., Burgess, C., Dean, S., Koutsopoulou, G. Z., & Hugh-Jones, S. (2017). How effective are mindfulness-based interventions for reducing stress among healthcare professionals? A systematic review and meta-analysis. *Stress and Health*, 33, 3–13. <https://doi.org/10.1002/smi.2673>
- Champion, V. L., & Skinner, C. S. (2008). The health belief model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research and practice* (pp. 45-65). Jossey-Bass.
- Costa, D. (2018). Better days at work: Identifying, preventing burnout in occupational therapy practice. *Occupational Therapy Practice*, 23(6), 10–15.
- DeHert, S. (2020). Burnout in healthcare workers: Prevalence, impact and preventative strategies. *Local and Regional Anesthesia*, 13, 171–183. <https://doi.org/10.2147/LRA.S240564>

- Demerouti, E., Bakker, A., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments. *European Journal of Psychological Assessment, 19*(1), 12-23. <https://doi.org/10.1027/1015-5759.19.1.12>
- Demerouti, E., Mostert, K., & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology, 15*(3), 209–222. <https://doi.org/10.1037/a0019408>
- Garcia, C. L., Abreu, L. C., Ramos, J. L. S., Castro, C. F. D., Smiderle, F. R. N., Santos, J. A. D., & Bezerra, I. M. P. (2019). Influence of burnout on patient safety: Systematic review and meta-analysis. *Medicina, 55*, 553. <https://doi.org/10.3390/medicina55090553>
- Goodman, V., Wardrope, B., Myers, S., Cohen, S., McCorquodale, L., & Kinsella, E. A. (2019). Mindfulness and human occupation: A scoping review. *Scandinavian Journal of Occupational Therapy, 26*(3), 157–170. <https://doi.org/10.1080/11038128.2018.1483422>
- Halbesleben, J. R. B., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work & Stress, 19*(3), 208–220. <https://doi.org/10.1080/02678370500340728>
- Hoover, E. B., Butaney, B., Bernard, K., Coplan, B., LeLacheur, S., Straker, H., Carr, C., Blesse-Hampton, L., Naidu, A., & LaRue, A. (2022). Comparing the effectiveness of virtual and in-person delivery of mindfulness-based skills within healthcare curriculums. *Medical Science Educator, 32*(3), 627–640. <https://doi.org/10.1007/s40670-022-01554-5>
- Impact Center. (n.d.). *Acceptability of intervention measure, intervention appropriateness measure, & feasibility of intervention measure*. Frank Porter Graham Child Development Center. https://ictp.fpg.unc.edu/sites/ictp.fpg.unc.edu/files/resources/Triple%20P%20System%20Implementation%20Outcomes_Acceptability%2C%20Appropriateness%2C%20Feasibility.pdf
- Institute for Mindfulness-Based Approaches. (2023). *What is MBSR?* Retrieved from <https://www.institute-for-mindfulness.org/offer/mbsr/what-is-mbsr>
- Jones, M., & Johnston, D. (2011). Understanding phenomena in the real world: The case for real time data collection in health services research. *Journal of Health Services Research & Policy, 16*(3), 172–176. <https://doi.org/10.1258/jhsrp.2010.010016>
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hyperion.
- Kim, S., Bayer, I., Gewurtz, R., Larivière, N., & Letts, L. (2022). Comparing web-based and in-person educational workshops for Canadian occupational therapists and understanding their learning experiences: Mixed methods study. *JMIR Medical Education, 8*(1), e31634. <https://doi.org/10.2196/31634>
- Lieberman, M. D., Eisenberger, N. I., Crockett, M. J., Tom, S. M., Pfeifer, J. H., & Way, B. M. (2007). Putting feelings into words: Affect labeling disrupts amygdala activity in response to affective stimuli. *Psychological Science, 18*(5), 421–428. <https://doi.org/10.1111/j.1467-9280.2007.01916.x>

- Lieberman, M. D., Inagaki, T. K., Tabibnia, G., & Crockett, M. J. (2011). Subjective responses to emotional stimuli during labeling, reappraisal, and distraction. *Emotion, 11*(3), 468–480. <https://doi.org/10.1037/a0023503>
- Luken, M., & Sammons, A. (2016). Systematic review of mindfulness practice for reducing job burnout. *American Journal of Occupational Therapy, 70*(2), 7002250020p1–7002250020p10. <https://doi.org/10.5014/ajot.2016.016956>
- Magee, R. (2020, March 23). *The S.T.O.P. practice: Creating space around automatic reactions*. Mindful. <https://www.mindful.org/the-s-t-o-p-practice-creating-space-around-automatic-reactions/>
- Neff, K. (n.d.). *Soften, soothe, allow: Working with emotions in the body*. https://self-compassion.org/wp-content/uploads/2020/08/softensootheallow_cleaned_01-cleanedbydan.mp3
- Nourian, M., Nikfarid, L., Khavari, A. M., Barati, M., & Allahgholipour, A. R. (2021). The impact of an online mindfulness-based stress reduction program on sleep quality of nurses working in COVID-19 care units: A clinical trial. *Holistic Nursing Practice, 35*(5), 257–263. <https://doi.org/10.1097/HNP.0000000000000466>
- Nummenmaa, L., Glerean, E., Hari, R., & Hietanen, J. K. (2014). Bodily maps of emotions. *Proceedings of the National Academy of Sciences of the United States of America, 111*(2), 646–651. <https://doi.org/10.1073/pnas.1321664111>
- Orsmond, G. I., & Cohn, E. S. (2015). The distinctive features of a feasibility study: Objectives and guiding questions. *OTJR: Occupation, Participation and Health, 35*(3), 169–177. <https://doi.org/10.1177/1539449215578649>
- Poulsen, A. A., Meredith, P., Khan, A., Henderson, J., Castrisos, V., & Khan, S. R. (2014). Burnout and work engagement in occupational therapists. *British Journal of Occupational Therapy, 77*(3), 156–164. <https://doi.org/10.4276/030802214X13941036266621>
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health, 38*(2), 65–76. <https://doi.org/10.1007/s10488-010-0319-7>
- Reid D. T. (2013). Teaching mindfulness to occupational therapy students: Pilot evaluation of an online curriculum. *Canadian Journal of Occupational Therapy, 80*(1), 42–48. <https://doi.org/10.1177/0008417413475598>
- Roberts, J. L., Williams, J., Griffith, G. M., Jones, R. S. P., Hastings, R. P., Crane, R., Bryning, L., Hoare, Z., & Edwards, R. T. (2020). Soles of the feet meditation intervention for people with intellectual disability and problems with anger and aggression: A feasibility study. *Mindfulness, 11*, 2371–2385. <https://doi.org/10.1007/s12671-020-01454-y>
- Roundy, P. E., Stearns, Z. R., Willis, M. W., Blevins, J. J., Linton, T. A., Medlin, T. R., Winger, J. G., Dorfman, C. S., & Shelby, R. A. (2023). Relationships between burnout and resilience: Experiences of physical therapists and occupational therapists during the COVID-19 pandemic. *Physical Therapy, 103*(5), pzad022. <https://doi.org/10.1093/ptj/pzad022>

- Shin, J., McCarthy, M., Schmidt, C., Zellner, J., Ellerman, K., & Britton, M. (2022). Prevalence and predictors of burnout among occupational therapy practitioners in the United States. *American Journal of Occupational Therapy*, 76(4), 7604205080. <https://doi.org/10.5014/ajot.2022.048108>
- Siegel, D. [Dalai Lama Center for Peace and Education]. (2014, December 8). *Name it to tame it* [Video]. YouTube. <https://www.youtube.com/watch?v=ZcDLzppD4Jc>
- Stahl, B. (2016, April 28). *Mindful check-in practice*. Mindful. <https://www.mindful.org/a-daily-mindful-check-in-practice/>
- Taylor, R. R. (2017). *Kielhofner's research in occupational therapy: Methods of inquiry for enhancing practice* (2nd ed.). F.A. Davis Company.
- Tipa, R. O., Tudose, C., & Pucarea, V. L. (2019). Measuring burnout among psychiatric residents using the Oldenburg Burnout Inventory (OLBI) instrument. *Journal of Medicine and Life*, 12(4), 354–360. <https://doi.org/10.25122/jml-2019-0089>
- Weiner, B. J., Lewis, C. C., Stanick, C., Powell, B. J., Dorsey, C. N., Clary, A. S., Boynton, M. H., & Halko, H. (2017). Psychometric assessment of three newly developed implementation outcome measures. *Implementation Science*, 12(1), 108. <https://doi.org/10.1186/s13012-017-0635-3>
- World Health Organization. (2019). *Burnout an "occupational phenomenon": International Classification of Diseases*. https://www.who.int/mental_health/evidence/burn-out/en/
- Zaccaro, A., Piarulli, A., Laurino, M., Garbella, E., Menicucci, D., Neri, B., & Gemignani, A. (2018). How breath-control can change your life: A systematic review on psycho-physiological correlates of slow breathing. *Frontiers in Human Neuroscience*, 12, 353. <https://doi.org/10.3389/fnhum.2018.00353>
- Zeman, E.A., & Harvison, N. (2017). *Burnout, stress, and compassion fatigue in occupational therapy practice and education: A call for mindful, self-care protocols* [Commentary]. National Academy of Medicine Perspectives, National Academy of Medicine, Washington, DC. <https://doi.org/10.31478/201703g>
- Zeng, X., Oei, T. P., & Liu, X. (2014). Monitoring emotion through body sensation: A review of awareness in Goenka's Vipassana. *Journal of Religion and Health*, 53(6), 1693–1705. <https://doi.org/10.1007/s10943-013-9754-6>
- Zhang, K. K., & Thompson, A. W. (2022). Effectiveness of electronic learning for continuing interprofessional education on behavior change of healthcare professionals: A scoping review. *Journal of Interprofessional Care*, 1–11. <https://doi.org/10.1080/13561820.2022.2071850>

Appendix A

Curriculum Overview

Week 1	Week 2	Week 3
Synchronous Session <ul style="list-style-type: none"> Welcome, intentions for the course, & introductions Community Guidelines Signs of burnout and implications for well-being and practice Benefits of mindfulness 	Synchronous Session <ul style="list-style-type: none"> Welcome & review the Community Guidelines Reflection: barriers and self-efficacy implementing mindfulness at work 	Synchronous Session <ul style="list-style-type: none"> Welcome & review the Community Guidelines Reflection: barriers and self-efficacy implementing mindfulness at work
Experiential Learning: Mindfulness Strategy <ul style="list-style-type: none"> Stop, Take a breath, Observe, and Proceed (STOP; Magee, 2020; Zaccaro et al., 2018) Soles of the Feet (Roberts et al., 2020) 	Experiential Learning: Mindfulness Strategy <ul style="list-style-type: none"> 3-Center Check-In (Stahl, 2016) 	Experiential Learning: Mindfulness Strategy <ul style="list-style-type: none"> Finding Emotions in the Body (Lieberman et al., 2007; Lieberman et al., 2011; Zeng et al., 2014)
Discussion <ul style="list-style-type: none"> Discuss barriers Recognize cues to action Reflect on self-efficacy 	Discussion <ul style="list-style-type: none"> Discuss barriers Recognize cues to action Reflect on self-efficacy 	Discussion <ul style="list-style-type: none"> Discuss barriers Recognize cues to action Reflect on self-efficacy
Optional <ul style="list-style-type: none"> Readings: <ul style="list-style-type: none"> Better Days at Work: Identifying, Preventing Burnout in Occupational Therapy Practice (Costa, 2018) 10 Ways to be More Mindful at Work (Alidina, 2018) 	Optional <ul style="list-style-type: none"> Soften-Soothe-Allow guided meditation practice (Neff, n.d.) Video: Name It to Tame It (Siegel, 2014) Readings: <ul style="list-style-type: none"> Bodily Maps of Emotions (Nummenmaa et al., 2014) 	Optional <ul style="list-style-type: none"> Soften-Soothe-Allow guided meditation practice (Neff, n.d.) Video: Name It to Tame It (Siegel, 2014)
Conclusion/Questions	Conclusion/Questions	Program Conclusion/ Questions/Resources/ Post-test