Critical Appraisal Form-Quantitative Study

Article Citation:

Study Level of Evidence, What Type of Study?

Level I: ___RCT
Level II: _X_Cohort trial ___Case-control trial ___Non-randomized control trial
Level III: ___Case-control ___no pre-post test
Level IV: ___Single case study ___Case series ___No comparison group
Level V: ___Descriptive study ___Narrative review ___Expert opinion

Purpose of Study: Is purpose clear? _x_ yes ___no

Describe researchers question/purpose:

The purpose of this article is to evaluate the effectiveness of an online curriculum approach to teaching mindfulness to occupational therapy students, to examine students' commitment to practice mindfulness, and to determine clinical utility of the curriculum.

METHODS

Were there any biases or ethical concerns in the study design?

There were no ethical concerns of this study. The study received ethical approval from the university research ethics board.

POPULATION

Who was the sample, how many subjects?

- N=15 female 1st-year master’s-level occupational therapy graduate students
- OT program at a large, research-intensive university
- n= 9 Canadian, n= 3 Asian, n= 2 European, n= 1 Hispanic

Inclusion Criteria:

Must be a first-year master’s level graduate student in that particular occupational therapy program.

Exclusion Criteria:

None mentioned

What was the intervention? Frequency, setting?

- Pre-post test administered at Week 1, Week 8
- 8-week online program through the university blackboard portal system, which included 3-weekly modules of PDF and video files. They were given
- Course work included guided recorded meditations, informational, readings, and informational practice exercise.
- Provided training in mindfulness meditation, education on topics such as mindful communication, mindful eating, mindful movements, compassion, awareness, and reflection
Private journal was included for students to post reflections on their experiences from the previous week.

### Relevant outcomes to OT? How measured?

<table>
<thead>
<tr>
<th>#</th>
<th>Outcome</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>1</td>
<td>Mindfulness</td>
<td>The Mindfulness Attention and Awareness Scale</td>
</tr>
<tr>
<td>2</td>
<td>Commitment to practice</td>
<td>6 author subjective questions</td>
</tr>
<tr>
<td>3</td>
<td>Clinical utility</td>
<td>6 author developed subjective questions</td>
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</table>

**Were the tests valid? Explain**
The MAAS test is a standardized test that has established validity. The author-developed subjective questions have unknown validity as the questions are not based on a standardized test and the questions are not available in the article.

**Were the tests reliable? Explain**
The MAAS is reliable because the researcher has good internal consistency which ranged from .81 to .89. There was also a test-reset result that ranged from .35 to .52 and .81. The subjective tests reliability are unknown.

### RESULTS, CONCLUSIONS, CLINICAL IMPLICATIONS:

**What were the findings? Was there:**

**Statistically significant change?** Yes, results showed a statistically significant change (p = 0.002) on the MAAS. The student participants identified guided meditations and informal practice as having the most clinical utility in the curriculum.

**Clinically significant change? Explain.** Yes. Participants who had low base MAAS scores tended to have higher change in MAAS score after participating. Usefulness was rated as moderate to excellent. Participants found that guided meditations and informal practice exercise were more useful for developing their understanding and approach to mindfulness. The mindfulness curricula may be necessary for preparing students with knowledge about mindfulness and strategies for self-care that can be incorporated in their life as students as they engage in occupation based practice. Content and compassion may be introduced into specific occupational therapy courses to teach mindfulness.

**What did the author conclude?** This study suggests that mindfulness can be taught using an online approach, which offers an accessible approach to learning about mindfulness concepts, informal practice, and meditation techniques. Also, mindfulness training may help students manage their self-care and may contribute to health and well-being. Finally, participating in an 8-week online mindfulness-training program provides opportunities to commit to continue practicing mindfulness in daily life.

### My Brief Summary:
**What I see as study strengths:** One of the strengths of this study was the fact that it was relevant to the generation students’ are in today. Making the mindfulness program online made it relevant in the fact that today’s students are technologically driven. It not only related to the qualities of their generation, but also having it online allowed easier accessibility for the individuals to access this program from their home. Another strength of this study was that it allowed the individuals to participate on their own time. Student’s schedules can be rigorous and
time consuming, and therefore allowing them to incorporate it into their schedules at a time that was best for them most likely encouraged them to participate and not feel as if it added to stress of schoolwork.

What I see as limitations: One of the study’s limitations was the fact that they did not have a method of weekly encouragement to facilitate member’s participation weekly. For instance, the study suggested that if e-mails would have been sent weekly, then participants might have been more apt to participate every week, considering members did not. Considering the study only incorporated a small population, it may not be generalizable to other populations.

How is the study’s findings relevant to OT? The study had a positive impact on the occupational therapy students lives, for they desire to continue practicing mindfulness as practitioners. Mindfulness can assist students to be more present with their clients in fieldwork, for it enhances their awareness and acceptance, which in turn may enhance their experience with clients in fieldwork. If the students use these techniques in their fieldwork experience and have a positive outcome, they will be more likely to carry on these techniques into their future profession. As practitioners, these individuals have first-hand experience with using these techniques and therefore are able to teach them to their clients more effectively.

How do I intend to use these results? As occupational therapy students, we can utilize these results in a way to reduce stress in our everyday lives. Considering there is now evidence that mindfulness techniques are effective, students may wish to practice these techniques when experiencing stress with their course load. In the future, we can apply this concept of mindfulness both for ourselves and for our clients. We will want to keep a mindful outlook when working with patients in order to prevent frustration. We will also want to teach our patients these techniques in order to help them cope with their everyday lives.