

Graduate Speech-Language Pathology Students' Perceptions of Practicing Mindfulness

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Abstract

Introduction: The purpose of this qualitative, exploratory study was to examine graduate speech-language pathology students' perceptions of practicing mindfulness, including their perceived barriers to using mindfulness techniques after participating in an 8-week mindfulness program. **Methods:** A convenience sample of 31 second-year, graduate speech-language pathology students participated in eight weekly mindfulness sessions, which included guided meditation, yoga stretching, and breathwork. At the end of the eight weeks, participants completed a six-question survey. Four questions that generated data about their perceptions of mindfulness and barriers to practicing mindfulness were analyzed using descriptive statistics and thematic analysis procedures. **Results:** The majority of participants indicated that their perception of meditation changed, they recognized the benefits of mindfulness practice, and that they intended to continue practicing on their own. Thematic analysis revealed that participants viewed thoughts, time, and breathing techniques as barriers to their practice. **Conclusion:** Findings from this study have implications for considerations in the implementation and development of a mindfulness program for speech-language pathology students with an emphasis on potential barriers and how they can be addressed. Future research could investigate how students' mindfulness practice impacts interactions with their clients and subsequent clinical outcomes.

Keywords: Counseling, graduate students, meditation, mindfulness

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INTRODUCTION

Stress may be an inherent part of the graduate school experience, which can be detrimental to students' academic success if not managed appropriately.^[1-5] Research has shown the positive outcomes experienced by college students, including medical, physical therapy, and speech-language pathology (SLP) students who participate in mindfulness-based programs.^[1,4-8] Reported benefits have included reduced stress and anxiety levels, decrease in blood pressure, increased self-compassion and a sense of well-being, and improved quality of life.^[9-12] While preliminary results have been positive, research on the implementation of mindfulness practice in health sciences programs, especially SLP, is lacking. Therefore, the purpose of this qualitative, exploratory study is to examine graduate SLP students' perceptions of mindfulness and perceived barriers to using mindfulness techniques after participating in an 8-week mindfulness program which incorporated various aspects of the Beck and Verticchio^[6,11] program. Exploration of these perceptions and barriers is essential to the development of successful mindfulness programs.

MATERIAL AND METHODS

Ethics

This study was approved by the research team's university institutional review board (IRB). Before the start of the study, all participants gave informed consent by signing the university IRB consent form, which outlined participation details in addition to the potential risks and benefits associated with participating in the study.

Participants

Participants were recruited from a graduate-level SLP program at a public university located in South Florida. To be eligible for the study, participants had to be enrolled in the program's second-year clinical seminar course, attend all program

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sessions, and complete the exit survey. Thus, a convenience sample of 31 second-year graduate SLP students participated in this study. The participant pool consisted of ($n = 29$) females and ($n = 2$) males between the ages of 22–29 years old. In terms of ethnicity, ($n = 27$) were Hispanic/Latino, ($n = 3$) were Caucasian, and ($n = 1$) was Asian. They were all in their second to last semester (fifth out of six semesters), which is also the semester that the majority of the students in this particular program take their Praxis examinations, which is a requirement for graduation. All had successfully completed at least two clinical rotations and were enrolled in either their third or fourth rotation (out of four required rotations) at the time of the study.

Mindfulness program design

The instructor for this meditation project was a full-time faculty member in the participants' SLP program. At the time of the study, she had over 30 years' experience practicing mindfulness, meditation, and yoga. With consideration for the scheduling issues described in Beck and Verticchio,^[6] this program took place during participants' weekly required clinical seminar course. This ensured that there were no conflicts with other classes or clinical practicum schedules. The program itself ran for eight consecutive weeks, with each session being 45 min to 1 h in duration. A regular college classroom was transformed into a meditation studio with the purpose of helping participants to let go of the academic atmosphere and all of its demands. Prior to the start of each session, participants would quietly enter the room and take 3–5 min to sit in stillness and settle in. Sessions began with a 5–10-min exploration of a topic related to mindfulness and meditation, such as gratitude, acceptance, and self-love. This activity was followed by 20 min of guided meditations, breathing exercises, and yoga postures. At the end of each session, group discussions related to the topic, activities, and participants' overall feelings took place for 15–20 min. Participants were encouraged to continue their meditation and mindfulness practice in between the weekly sessions on a daily basis.

Data collection

On the final day of the 8-week program, participants completed a six-question, pencil-and-paper exit survey that explored their perceptions of mindfulness and meditation, the likelihood of continuing to practice learned techniques independently, and their perceptions of barriers to practicing mindfulness [Appendix 1]. They were instructed not to include any identifying information like their names or student identification numbers on the survey to keep their responses anonymous. In preparation for analysis, each survey was labeled with a participant identification number displayed as P1, P2, P3, and so on throughout the subsequent sections of this work.

Data analysis

Four questions that generated data relative to the participants' perceptions of mindfulness, their thoughts on continuing

practice and perceived barriers of practicing mindfulness were analyzed for the purposes of this study. The two questions not included in the current study generated data that provided the instructor with feedback about the design of the program (i.e. Q1 "Of the following, what were the three most enjoyable aspects about participating in this project?"; and Q6 "What can you recommend to improve upon future meditation projects?").

Descriptive statistics

Descriptive statistics were used to quantify participants' responses to questions that did not generate robust narrative responses (i.e., Q2 "Did your perception of meditation change over the duration of the project? Please explain.", Q3 "Do you think meditation can help with stress management? Please explain.", and Q5 "Do you expect to continue your meditation practice?") [Table 1].

Thematic analysis

Responses to the open-ended question Q4 "What was most difficult about learning to meditate?" were investigated using thematic analysis procedures. Thematic analysis is a qualitative tradition of inquiry that provides a systematic framework for coding data.^[13] It is a method for identifying, analyzing, and reporting patterns within a data set, which allows researchers to reflect participants' reality as well as study their reality on a granular level.^[14] Researchers chose this qualitative analytic method as it is an appropriate and effective means for investigating the nuances in participants' perceived barriers to practicing meditation. Thorough understanding of the perceived barriers can inform decisions in the planning and presentation of instructional content for future program sessions.

The researchers followed procedures outlined by Braun and Clarke,^[14] which initially involved becoming familiar with the data through repeated readings of the raw data the participants hand-wrote on their exit survey forms. These data were then transferred to an electronic spreadsheet to facilitate the next phase of analysis: generating initial codes. This was accomplished through color-coding the data based on semantic similarities. This process resulted in the creation of preliminary groups that were then checked against one another to ensure mutual exclusivity. In instances that semantic overlap was identified across groups, the groups were collapsed to avoid redundancy.^[15] The remaining groups were reviewed to ensure that their individual essences related to the data overall.^[16] Themes were then defined by the researchers and interpreted in light of the details about the program and the descriptive statistics results.

Reliability

Though the research team used the actual words participants included in their responses in the development of themes, researcher bias was still a factor in the interpretation of data. To minimize the biases inherent to interpretive work, the research team employed investigator triangulation, which entailed discussing all possible interpretations of participants' responses during the initial categorization of quotes as well as in the

Table 1: Perceptions of mindfulness

Question	Yes	No	N/A	Maybe
Did your perception of meditation change over the duration of the project?	25	5	1	0
Do you think meditation can help with stress management?	30	1	0	0
Do you expect to continue your meditation practice?	25	5	0	1

N/A: Not available

modification of groups resulting in the mutually exclusive major themes.^[17] On completing investigator triangulation, interrater agreement was established with a reviewer who had graduate-level training in clinical research methods. To accomplish this, labels were removed from the thematic groups of quotes. The reviewer, who was not familiar with the data, was asked to label the groups to the best of their ability. The reviewer's labels were then compared to the research team's labels. Labels were considered to be congruent if they carried the same semantic meaning. An agreement rate of 100% was achieved. The research team maintained fidelity of the data by checking the analysis spreadsheet against the locked master data spreadsheet during and at the end of the analysis phase to ensure participant identification numbers matched the data.

RESULTS

It should be noted that several quotes were referenced across multiple themes and/or sub-themes. Thus, the number of quotes giving rise to the themes and sub-themes presented in Table 2 ($n = 38$) differs slightly from the number of participants ($n = 31$).

DISCUSSION

The purpose of this exploratory study was to investigate graduate SLP students' perceptions of mindfulness and meditation, likelihood of continuing to practice learned techniques independently, and descriptions of aspects that they felt were difficult in practice. Descriptive statistics were used to analyze responses to survey questions that generated 'yes' and 'no' responses, while thematic analysis procedures were followed to investigate participants' novel responses to an open-ended question about barriers to practicing meditation.

Over the course of the program, participants were engaged in approximately 8 h of mindfulness-based instruction and practice. This material was supplemented with information about the immediate and long-term benefits of mindfulness and meditation. Given that these benefits were made explicit, the results yielded by the "yes" and "no" perception-based questions come as no surprise. To begin with, a majority of the participants' (25/31) perceptions of meditation changed over the course of the program. Similarly, a majority of the participants (30/31) reported that they think meditation can help reduce stress, which is a finding supported by previous literature.^[18-22] When asked if they expected to continue

to practice meditation, 25 of the 31 participants responded with "yes," five participants responded with "no," and one with "maybe." Given the rigor of practicing mindfulness and meditation, it was encouraging to learn that the bulk of the participants planned to continue practicing techniques independently. These challenges were brought to light in the results of the thematic analysis.

In the data generated by the open-ended question Q4 "What was most difficult about learning to meditate?", three major themes were uncovered: Theme 1 "Turning off my thoughts", Theme 2 Aspects of time, and Theme 3 Focusing on the breath.

Major theme 1: "Turning off my thoughts"

As evidenced by the data giving rise to theme 1, participants expressed that it was difficult to transition to a place of stillness, peace, and calm, and to let go of the events of the day after busily maneuvering from task to task and from internship to classes. They indicated it was not easy to focus on the present moment and to let go of their responsibilities and lists of things to do related to their studies as well as their personal lives. The expectations, requirements and rigor of the SLP program plus additional daily responsibilities all had an impact on the perceived barriers to fully accepting and practicing the material presented during the meditation classes. The nuances of this barrier gave rise to three sub-themes including: Sub-theme 1 Notion of clearing the mind, Sub-theme 2 The looming to-do list, and Sub-theme 3 Tuning into sense perceptions.

Sub-theme 1: Notion of clearing the mind

Even though clearing the mind is not the primary goal of mindfulness, the most frequently cited perceived barrier to being mindful during sessions was clearing the mind (12/31). The objective of mindfulness is to pay attention to one's thoughts, without judgment, on purpose and in the present moment.^[23] Activities that focused on awareness, such as guided meditations and being still proved to be challenging.

Sub-theme 2: The looming to-do list

Graduate students in SLP programs are inundated with checklists through their course work (i.e., requirements for projects, papers, studying for exams); clinical practicum responsibilities (i.e., elements of clinical report writing, lesson plans, evaluations); and program requirements (i.e., Praxis, Knowledge and Skills Outcomes, graduation application). On top of these checklists, students create their own checklists to manage the demands of graduate school as well as their personal lives. In fact, creating checklists and to-do lists is a form of time management that provides a sense of calm and control when they may feel that they have none. A total of ($n = 8$) participants stated that it was difficult to let the mind release these lists for even a short span of time. Given the importance of to-do lists to this population, in particular, it is easy to see how letting go of them feels almost impossible.

Sub-theme 3: Tuning into sense perceptions

Using sense perception is one way to be in the present moment. It has to do with the ability to focus on one's physical being

Table 2: Major themes derived from participants' reports of barriers to mindfulness practice

Major themes	Sub-themes	n	Exemplar quotes and participant codes
"Turning off my thoughts"	Notion of clearing the mind	12	"Not wandering off when meditating" (P7) "Not thinking about other things or letting my mind wander" (P8) "Trying to get my mind not to think" (P9) "Learning how to keep other thoughts out" (P10) "Turning "off" my thoughts" (P20) "Learning how to clear your mind" (P21) "Forgetting/putting aside all my other concerns/worries" (P30)
	The looming to-do list	8	"Finding a way to eliminate my to-do list in my mind" (P2) "Shutting off my mind and not letting my mind wander during the meditation (I would sometimes catch myself making mental to-do lists)" (P3) "Trying to keep my mind from thinking about all the things I had to do" (P6) "The noise in my head, all the things from the never ending "to do" list" (P12) "Turning off my thoughts and list of things to do" (P13) "Trying to take my mind off other things (exams, clinic, etc.)" (P14)
	Tuning into sense perceptions	8	"Learning to be in the present" (P5) "Learning to be still" (P19) "Concentrating and letting it all go" (P11) "Learning how to 'come back to the breath'" (P23) "Learning how to stop thinking about the past and future and focusing on the now" (P27) "Concentrating and not thinking of other things" (P28) "Being ok with not focusing on things on my to do list and being in the present moment" (P29) "The stillness aspect. It was difficult for me to remain calm, still, relaxed know that I still had so much on my to list to get done" (P31)
Aspects of time		7	"Length of time" (P1) "The most difficult part was (carving) out time to meditate. But (ultimately), I see (meditation) as time I dedicate to nourish myself" (P15) "The length of the meditations. It was difficult for a beginner" (P16) "Finding the time or remembering to meditate" (P17) "Time" (P24) "Feeling like I was losing or wasting time" (P25) "I had a difficult time with this at the end of the day after clinic and class" (P26)
Focusing on the breath		3	"The breathing/ the nostril breathing specifically" (P18) "Breathing" (P22) "Understanding that it is okay to recognize thoughts during meditation and just push them out and continue focusing on your breathing. Your mind does not have to be a 'big hole' of nothing" (P4)

using the five senses. For example, listening to the sounds that can be heard near and far; feeling what the body is touching (i.e., the feet on the floor, the legs against a chair or hands in the lap); seeing all that is in view; noticing scents such as flowers, food, incense, or the scent of fresh rain on the ground; and paying attention to the taste of the food when eating. The concept of "being still" was introduced using the five senses to create a feeling of calm and relaxation; ($n = 8$) participants found this aspect of the practice to be challenging.

The findings represented in theme 1 are supported by Beck and Verticchio,^[6] which also revealed participants' experienced difficulties with the mind wandering, maintaining focus, and letting go of things that were on their minds. These barriers can be mitigated through more explicit guidance and also reassurance from the instructor about these challenging experiences being part of the mindfulness journey. To facilitate calming of their bodies, more movement such as yoga could be incorporated in the mindfulness sessions. Participants need to be reminded on a regular basis that it is normal for the mind

to wander and for thoughts, feelings, and emotions to become part of the mindscape during practice. They can be taught to notice and acknowledge these thoughts without judgment or simply let them go. With sustained practice, the space between thoughts will widen, allowing for a greater sense of still in the mind.

Major theme 2: Aspects of time

Another concern expressed by ($n = 7$) participants was the concept of time, which included issues such as finding time to practice independently, the perception of time being wasted, the amount of time spent on particular activities, and the time of day that sessions took place. The concept of "finding time" is something that can be explicitly addressed during sessions. Participants need to be made aware that being mindful does not have to include sitting still for several minutes a day; rather it can occur during any activity throughout the day. Perceptions of time being wasted may be an artifact of the looming to-do list addressed in theme 1. If participants were focusing on tasks needing to be checked off of a list, then sitting still and

being mindful may have felt like a hindrance to completing these tasks. Something to consider is the fact that the majority of participants had never practiced mindfulness before the study; therefore, the idea of “being” rather than “doing” was foreign. Similar to the practice of acknowledging thoughts and letting them go, this concept becomes more apparent with consistent practice over time. In the spirit of playing to the participants’ strengths, it could be suggested that mindfulness practice be added to participants’ to-do lists to create a sense of accomplishment.

Other aspects of time hindering participants’ mindfulness practice had more to do with the structure and scheduling of the mindfulness program sessions than the active practice of techniques. A variety of activities occur during mindfulness sessions, and the duration of each should be considered, especially when working with beginners. Time of day is indeed a personal preference for many practitioners; however, given participants’ class and clinical schedules, there was not much flexibility in scheduling the mindfulness sessions. This finding should be considered in light of Beck and Verticchio^[6] wherein participants enjoyed “starting the day” with mindfulness practice, whereas the participants in the current study were “ending the day” with evening sessions.

Major theme 3: Focusing on the breath

Another component of the mindfulness program that was perceived as challenging by the participants ($n = 3$) had to do with the breathing component of mindfulness. Aspects of breathing that were noted as difficult were learning specific breathing techniques, “focusing on the breath” and “coming back to the breath.” Breath work is a regular part of most meditation and mindfulness programs and is not easy for beginning practitioners. Learning new techniques takes time and effort, but with practice, they become easier. “Focus on the breath” and “coming back to the breath” are often repeated by meditation instructors to remind students to come back to the present moment if their mind wanders during practice. Instructors should remind beginners that “coming back to the breath” is a strategy that can be used when the mind wanders during practice, which has implications for remediating the barriers described in themes 1 and 2 of this study.

CONCLUSION

Participants’ perceptions of mindfulness were positive overall, with the majority stating they planned to continue their practice of mindfulness independently. Perceived barriers to practicing mindfulness included “turning off” thoughts, aspects of time, and focusing on the breath. Turning off thoughts about to-do lists and focusing on the breath were challenging for participants. These barriers could be countered in future mindfulness programs through the instructor providing frequent reminders that it is normal for the mind to wander and difficult to come back to the breath. Participants should be reminded that with continuous practice, these challenges will be minimized. To alleviate issues related to time, participants’ academic

and clinical schedules need to be considered. Perceptions of mindfulness with an emphasis on the perceptions of barriers are important factors in the development of a successful mindfulness program for graduate SLP students.

Limitations of the study

Limitations of this study include a potential lack of generalizability given the qualitative nature of results as well as the small sample size. Similarly, the sample was heterogeneous given that all participants were recruited from the same graduate SLP cohort.

Implications and future research

Findings from this study have implications for considering explicit instruction that normalizes typical roadblocks experienced by beginners in the practice of mindfulness. How particular strategies such as “coming back to the breath” can be used to overcome these barriers can also be emphasized. Future research could investigate how students’ mindfulness practice impacts interactions with their clients and subsequent clinical outcomes.

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Conflicts of interest

There are no conflicts of interest.

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APPENDIX

Appendix 1: Mindfulness program exit survey

1. Of the following, what were the three most enjoyable aspects about participating in this project?
 - a. Facebook page
 - b. Ambiance (the room setup)
 - c. Music
 - d. Guided meditations
 - e. Breathing techniques
 - f. Netflix Video “On Meditation”
2. Did your perception of meditation change over the duration of the project?
3. Do you think meditation can help with stress management?
4. What was most difficult about learning to meditate?
5. Do you expect to continue your meditation practice?
6. What can you recommend to improve upon future meditation projects?