

Assessing Mindfulness Among Speech-Language Pathology Students

Mark W. Pellowski¹

Abstract

Levels of mindfulness were assessed among 378 undergraduate and graduate speech-language pathology students in an attempt to develop normative data (for each year of school) based on scores from standardized scales. Participants completed the *Cognitive and Affective Mindfulness Scale-Revised* (Feldman, 2007) and the *Mindful Attention Awareness Scale* (State & Trait version; Brown & Ryan, 2003). Findings allow undergraduate or graduate speech-language pathology students to self-assess their state and trait levels of mindfulness and determine if their scores are similar to, or differ from their peers based on reported normative data. Subsequently, a student may be encouraged to participate in mindfulness training in order to enhance his/her overall well-being and counseling skills needed as a future clinician.

Keywords: mindfulness, speech-language pathology, counseling, students, training

Mindfulness can be defined as “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (Kabat-Zinn, 1994, p. 4). Bishop and colleagues (2004) proposed two components to their mindfulness definition and model; one involves self-regulation of attention and the other includes adjusting oneself to “a particular orientation towards one’s experiences in the present moment” (p. 232). The first component, self-regulation of attention, allows for heightened awareness of mental events in the present, whereas the second component is characterized by acceptance, curiosity, and openness.

Mindfulness has been implicated as a factor that can promote well-being and success for students, clinicians, and clients in the field of speech-language pathology (Ahmadi et al., 2014; Beck et al., 2017; Beck & Verticchio, 2014a & 2014b; Boyle, 2011; Emge & Pellowski, 2019). Beck and colleagues (2017) studied the effects of mindfulness learning and practice among 19 undergraduate (communication sciences and disorders major) and 18 graduate (speech language pathology) students. They reported that the experimental group demonstrated decreased perceived levels of stress (which was measured by self-report) and improvement in biological indicators of stress. In addition, participants in the experimental group reported advances in self-compassion as well as decreased anxiety, depression, and negative aspects of perfectionism, which are all factors associated with a person’s general well-being. These findings supported those previously reported by Beck and Verticchio (2014b), which suggested that mindfulness practice completed by speech language pathology (and audiology) graduate students decreased their perceived stress and enhanced their confidence related to counseling skills in their profession.

Mindfulness is not only important for undergraduate and graduate students, but perhaps even more so for practicing clinicians. For example, heightened levels of mindfulness may improve clinicians’ interactions with clients and families when providing diagnostic and treatment services. Dobkin et al. (2016) reported that enhanced levels of mindfulness among clinicians had a direct and positive impact on their overall well-being and their patients reported being better understood, thus improving clinician-client interactions. Moreover, Gilmartin et al. (2017) conducted a systematic review of fourteen studies that assessed the effects of mindfulness practices for healthcare providers. Nine of the 14 studies reported results noting improved changes in mindfulness, levels of anxiety and stress, as well as burnout symptoms.

Many interactive counseling strategies are also associated with mindfulness, such as active listening, which involves paying focused mental attention to a client’s verbal and non-verbal messages. It is also linked to improved emotional regulation and balance, which is essential when attempting to regulate the behavior and emotional state of a client and/or parent (Beck & Verticchio, 2014b; Davis & Hayes, 2011). The American Speech Language and Hearing Association (ASHA) noted that “speech language pathologists counsel by providing education, guidance, and support.

¹ Department of Speech-Language Pathology and Audiology, Towson University, 8000 York Road, Towson, MD. 21252
mpellowski@towson.edu

Individuals, their families, and caregivers are counseled regarding acceptance, adaptation, and decision making about communication, feeding and swallowing, and related disorders” (ASHA, 2016). Indeed, counseling certainly falls within the speech-language pathologist’s scope of practice.

Although the benefits of mindfulness for students and practicing clinicians warrants attention, very few studies have focused specifically on assessing mindfulness among these individuals using standardized mindfulness scales. Moreover, previous studies have included a limited number of participants across different ages or grades in school. Therefore, the purpose of this investigation was to provide a more detailed analysis of assessing mindfulness among undergraduate and graduate speech-language pathology students, given its important relationship to their overall well-being, development of their academic and clinical skills, as well as their counseling abilities in the field of speech-language pathology.

More specifically, this investigation sought to develop and report normative data for undergraduate and graduate speech-language pathology students with respect to their state and trait levels of mindfulness, by administering three standardized mindfulness scales to a large participant sample. This will allow undergraduate or graduate speech-language pathology students to self-assess their state and trait levels of mindfulness (using standardized mindfulness scales) and then compare their scores to normative data from this study, as well as average normative scores previously published (from the college student and adult population). Subsequently, students can determine if their level of mindfulness is similar to, or differs from reported normative data, which may encourage them to participate in mindfulness training in order to enhance their overall well-being and counseling skills needed as future clinicians.

Method

The participants consisted of 378 undergraduate and graduate speech language pathology students, including 369 females and nine males (mean age = 21.5 years; SD = 2.7; range = 18-34). They were divided into six groups: a) freshman ($n = 35$; mean age = 18.1); b) sophomore ($n = 79$; mean age = 19.3); c) junior ($n = 85$; mean age = 21.2); d) senior ($n = 46$; mean age = 22.2); e) first-year graduate ($n = 64$; mean age = 22.8); and f) second-year graduate ($n = 69$; mean age = 23.5). All participants were registered students at Towson University (Towson, MD) and provided informed consent prior to beginning the study.

All participants completed three unidimensional mindfulness questionnaires: a) the *Cognitive and Affective Mindfulness Scale-Revised* (CAMS-R; Feldman, 2007); b) the *Mindful Attention Awareness Scale – Trait Version* (MAAS-T; Brown & Ryan, 2003); and c) the *Mindful Attention Awareness Scale – State Version* (MAAS-S; Brown & Ryan, 2003). The CAMS-R is a 10-item survey that evaluates self-reported mindfulness in daily life. It includes questions related to acceptance, attention, present-focus, and awareness of internal experience (a total score ranges from 10 to 40 and a higher score reflects greater mindfulness qualities; Feldman, 2007). The MAAS-T is a 15-item survey designed to evaluate the participant’s self-reported mindfulness in day-to-day experiences (a total score ranges from 1 to 6 and a higher score reflects higher levels of dispositional mindfulness; Brown & Ryan, 2003). Finally, the MAAS-S is a 5-item survey that assesses the participant’s self-reported ability to remain mindful during the present moment (a total score ranges from 0 to 6 and a higher score reflects higher state levels of mindfulness; Brown & Ryan, 2003).

Results

Table 1 presents the distribution of means and standard deviations of the MAAS-T, MAAS-S, and CAMS-R scores from freshman, sophomore, junior, senior, first-year graduate and second-year graduate students, as well as the total group. In addition, Table 1 provides normative data for the MAAS-T scale (Brown & Ryan, 2003) which was derived from several independent samples of college students ($N = 1179$; average age = 19.5 years [range 17-32]; female = 64%) and the CAMS-R scale (Feldman, 2007) which was also derived from a sample of college students ($N = 212$; average age = 19.03 years [SD = 2.35]; female = 60%).

Table 1. Distribution of mean scores and standard deviations (SD) from the MAAS-T, MAAS-S, and CAMS-R scales from the participants (including normative data for the MAAS-T [Brown & Ryan, 2003; $N = 1179$] and CAMS-R [Feldman, 2007; $N = 212$]).

	Freshman	Sophomore	Junior	Senior
	(<i>n</i> = 35)	(<i>n</i> = 79)	(<i>n</i> = 85)	(<i>n</i> = 46)
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
MAAS-T	3.4 (0.4)	3.4 (0.6)	3.5 (0.8)	3.6 (0.5)
MAAS-S	3.2 (1.4)	3.3 (1.2)	3.4 (1.3)	3.5 (1.1)
CAMS-R	24.2 (3.5)	25.6 (4.4)	26.3 (5.2)	26.8 (4.2)
	1st Yr Grad	2nd Yr Grad	Total	Normative Data
	(<i>n</i> = 64)	(<i>n</i> = 69)	(<i>N</i> = 378)	N/A
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
MAAS-T	3.6 (0.6)	3.7 (0.5)	3.5 (0.6)	3.8 (0.7)
MAAS-S	3.6 (1.2)	3.6 (1.3)	3.4 (1.3)	N/A
CAMS-R	26.7 (4.4)	28.4 (5.4)	26.3 (4.5)	30.5 (5.9)

Discussion

Results indicated that speech-language pathology undergraduate and graduate students exhibited varied levels of mindfulness relative to age, level of education, and type of assessment (e.g., state vs. trait). When compared to the normative samples reported by Brown and Ryan (2003) as well as Feldman (2007), the participants exhibited lower levels of mindfulness (i.e., scores) for all three standardized scales. Current findings allow undergraduate or graduate speech-language pathology students to self-assess their state and trait levels of mindfulness and determine if their scale scores differ from their peers (based on their year in school) when compared to current and previously reported normative data. A student may then decide to participate in mindfulness training in order to enhance his/her academic, clinical, and counseling skills, as well as his/her overall well-being.

One currently popular mindfulness training method involves using a iOS or Android app, such as the *UCLA Mindful App* (UCLA Health System, 2020) or *Mindfulness Coach App* (US Department of Veterans Affairs, 2020), both developed by researchers and practicing clinicians. These apps provide self-guided training programs designed to assist one to learn about and adopt a simple mindfulness practice, which include audio-guided mindfulness exercises as well as goal-setting and tracking options to document progress over time. Mindfulness topics could also be incorporated into speech language pathology coursework at both the undergraduate and graduate level. Moreover, mindfulness training could be incorporated into clinical settings to assist student-clinicians in learning how to self-assess ones mindfulness using standardized scales and implementing mindfulness practice exercises into their everyday life. As discussed by Beck et al. (2017) and others (e.g., Schoeberlein & Sheth, 2009), training programs could involve 10- to 20-minute mindfulness sessions delivered on a weekly basis (over the course of an academic semester), which could focus on meditative practices, breath techniques, journaling, yoga, use of a mindfulness app, etc. All of these techniques are inexpensive, easy to learn, and do not require a significant time commitment (even when completed every day).

In summary, the current findings provide a more detailed analysis of assessing mindfulness (using standardized scales) among undergraduate and graduate speech-language pathology students. To date, this is the first study that focused specifically on assessing state and trait levels of mindfulness using the CAMS-R, MAAS-T, and MAAS-S for a large participant sample, in an attempt to develop and report normative data for each year in school (i.e., freshman through second-year graduate). Given its important relationship to students' overall well-being and development of their academic, clinical, and counseling skills, it is hoped that more mindfulness training programs will be offered in the classroom and various clinical settings in the field of speech-language pathology.

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