

The Effects of Mindful Breathing Training on Thai Undergraduate Students in EFL Classrooms

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Abstract—This paper explored the effects of mindful breathing training on Thai undergraduate students in EFL classrooms and the potential future use of mindfulness practice. Fifty-eight students at a private university in Thailand participated voluntarily and completed the 5-week mindful breathing training. This research project used a triangulation methodology. Quantitative data were collected using a closed-ended questionnaire, and qualitative data were gathered with an open-ended questionnaire, as well as data from a semi-structured interview. The results revealed that the mindful breathing training had positive effects on all students. Those effects included “having concentration” (43.10%), “reducing nervousness” (32.76%), “being mindful” (29.31%), “having positive feelings” (22.41%), “reducing anxiety” (12.07%), and “helping memorize things” (5.17%). 48 students (82.8%) planned to use the practice in the future. The positive effects suggested that this practice could offer an alternative approach to teaching English.

Keywords—Mindful breathing, teaching English, English as a Foreign Language

I. INTRODUCTION

RECENTLY, many scholars in the field of education have investigated the topic of mindfulness (Beck & Verticchio, 2014; Nieminen & Sajaniemi, 2016; Schwind et al., 2017; Van der Riet et al., 2015), and mindfulness practice has been used to help manage negative emotions (Beck & Verticchio, 2014; Borker, 2013; Chen, Yang, Wang, & Zhang, 2013; Maxwell & Duff, 2016; Van der Riet et al., 2015). Many studies have revealed that mindfulness has the benefits of reducing negative emotions, such as stress and anxiety (Chen et al., 2013; Maxwell & Duff, 2016; Schwind et al., 2017; Song & Lindquist, 2015; Specia, Carlson, Goodey, & Angen, 2000; Van der Riet et al., 2015), and increasing one’s level of concentration (Chen et al., 2013; Schwind et al., 2017; Van der Riet et al., 2015).

Although mindfulness training has been shown to be beneficial, much of the mindfulness research available has been conducted in the field of nursing education, which used mindfulness practice as an intervention to examine its effects on students’ stress or anxiety (Chen et al., 2013; Schwind et al., 2017; Song & Lindquist, 2015; Van der Riet et al., 2015). However, there has been little research on the effects of mindfulness practice in the field of teaching English. Thus, this research was designed to explore the effects of mindful breathing practices in English as a Foreign Language (EFL) classrooms to shed light on mindfulness in English language teaching.

The purpose of this paper was to investigate the way in

which mindfulness exercises affected EFL students who participated in the entire 5 week-training. Thus, only data from closed- and open-ended questions and interviews with the students who participated in the entire experiment are discussed and analyzed in this paper.

Two research questions were posed, as follows:

1. What are the effects of mindful breathing training on students in EFL classrooms?
2. What are the students’ perspectives about using mindfulness practice in the future?

II. LITERATURE REVIEW

Mindfulness training entails training one’s “...mind to be less reactive and more stable” (Kabat-Zinn, 1990, p. 65). There are many kinds of mindfulness practices, including mindful breathing, inviting the mindfulness bell, and mindful listening (Borker, 2013). Mindful breathing practices were found to be used commonly as one of several interventions in educational studies (Beck & Verticchio, 2014; Beddoe & Murphy, 2004; Chen et al., 2013; Van der Riet et al., 2015). What the practitioner has to do in the practice of mindful breathing is focus attention specifically on breathing. One has to observe and be aware of conditions, such as negative emotions or physical pain that might occur (Kabat-Zinn, 1990). When negative emotions arise, such as anxiety or worry, all one has to do is acknowledge them and bring one’s mind back to the breathing, focusing on the rising and falling of the stomach.

Mindfulness training has been used as an intervention in various educational studies in recent years (Beck & Verticchio, 2014; Beddoe & Murphy, 2004; Chen et al., 2013; Van der Riet et al., 2015), and it has been shown that the practice of mindfulness affected students positively in various ways. For example, Van der Riet et al.’s (2015) study found that mindfulness helped students concentrate on their assignments and decreased the occurrence of negative thoughts, while another study found that mindfulness practices helped reduce students’ anxiety (Chen et al., 2013; Song & Lindquist, 2015).

In the field of teaching English, there has been little research on mindfulness while speaking English aloud in public. Charoensukmongkol (2016) demonstrated a relation between mindfulness, anxiety, and presentation performance. Specifically, the study revealed that Thai undergraduate students who had a higher level of mindfulness had a tendency to have a low level of anxiety when giving a

presentation. Not only did they have low anxiety, but they also had higher presentation performances. Thus, mindfulness practices might have a positive effect on students' anxiety and ability to speak English. However, mindfulness practice or intervention was not used in the study. Thus, there is a need for experimental research on mindfulness practices in the teaching of English. Given this gap in the literature, this study was designed to examine the way in which mindfulness practices affect students in EFL classrooms.

III. METHODOLOGY

84 Thai undergraduate students, all of whom were third- or fourth-year students registered in three sections of the same English Listening and Speaking class in the summer term, and had a pre-intermediate level of English proficiency, were enrolled in the study. The students attended three hours of class twice weekly that is divided into two sessions: listening and speaking. A speaking test is given during the second session of each week.

To determine the effects of mindfulness training, mindful breathing exercises were introduced at the beginning of the second session of the second week, and continued for five weeks before they took their speaking tests. Thus, there were a total of five mindfulness practice sessions.

a. Intervention

Mindfulness training was given before the students took a second speaking test during the second week of the summer term. Thereafter, the students had to practice by themselves, using as a guide a mindfulness worksheet, which included instructions on how to perform the mindful breathing practice. This practice, which was adapted from Kabat-Zinn (1990), includes three steps. The first is to be aware of feelings that occur in the present moment. The students were asked to write their feelings on a piece of paper before they took the speaking test. The second step is the actual practice of mindful breathing while seated. The students practiced their mindfulness by breathing in and out. They had to sit with their backs straight, in a relaxed posture, and remain aware of the rising and falling of their bellies. If they felt something while they were breathing, they were told to simply acknowledge the feeling and then return their focus to their breathing by breathing in and out slowly. They were given approximately ten minutes to practice. Thereafter, they wrote their feelings on the piece of paper again. The third step is mindful breathing practice while standing. The students were called up to the front randomly to take their speaking tests. Before taking the test, the students were asked to stand in front of the class with their feet apart and their shoulders back. Then, they were asked to focus their attention on their bellies and breathe slowly and deeply in the same way as they did while performing the breathing and body awareness practice while seated.

This study used a triangulation method, which helps create a deeper understanding by collecting data from multiple sources of information (Jick, 1979); thus, this research used data from three different sources, closed- and open-ended questionnaires, and an interview. There were six closed- and open-ended questions and a semi-structured interview (See appendix). To validate the content, three

experts from the field were invited to examine the content validity of all instruments using the Index of Item-Objective Congruence (IOC). The students were given the questionnaire about the last mindfulness practice after their 6th speaking test. Thereafter, the participants took part in an individual interview. An individual interview was selected as a data-gathering method because of the sensitivity of the topic. Further, the participants could not be influenced by their peers' ideas during individual interviews (Stewart & Shamdasani, 1990). In the interview, the participants were asked to clarify their answers and talk about their experiences before and during the mindfulness practices.

The answers to the closed-ended questions were analyzed using frequencies in the descriptive statistics in SPSS and those to the open-ended questions and interview questions were analyzed using thematic content analysis.

b. Ethical Considerations

The University Research Ethics Committee approved the protocol for this study prior to the experiment. A researcher informed participants about the study objectives and procedures before offering the written informed consent. Participation was voluntary and confidential. If the participants were not interested in continuing the mindfulness practice, they could withdraw at any time throughout the study.

IV. RESULTS AND DISCUSSION

58 students (male=33, female=25) who ranged in age from 19 to 25 years completed the entire training, and 25 (male=14, female=11) were interviewed.

For research question #1, the data obtained from question number 4 on the questionnaire (Does mindful breathing practice have a positive or negative effect on you? What is/are the effect(s) of mindful breathing on you?) and interviews were analyzed using thematic content analysis. The results showed that all students (100%) reported that mindful breathing practices affected them positively. The quantified qualitative findings are shown in Table 1.

TABLE I
POSITIVE EFFECTS OF MINDFUL BREATHING PRACTICES

Positive Effects	Frequency	Percentage (%)
1. Having concentration	25	43.10%
2. Reducing nervousness	19	32.76%
3. Being mindful	17	29.31%
4. Having positive feelings	13	22.41%
a. feeling relaxed	6	10.34%
b. feeling calm or still	3	5.17%
c. feeling relieved	3	5.17%
d. feeling confident	1	1.72%
5. Reducing anxiety	7	12.07%
6. Helping memorize things	3	5.17%

As Table 1 shows, the positive effects of mindful breathing practices included producing higher levels of concentration (43.10%) and reducing nervousness (32.76%). Moreover, the mindfulness exercises helped the students

remain mindful (29.31%). The students also indicated that the exercises increased their positive feelings (22.41%), including feeling relaxed (10.34%), feeling calm or still (5.17%), feeling relieved (5.17%), and feeling confident (1.72%). Lastly, the students stated that the mindfulness practices helped them decrease their anxiety (12.07%) and memorize what they were going to say better (5.17%).

Here are some examples of the participants who reported that they achieved positive effects from mindful breathing practices.

1. Having concentration:

“A positive effect...It made (me) less nervous (and) have concentration with what I am doing” (female, #22). She said that she was able to concentrate when speaking in front of the classroom. She used to feel nervous and was unable to concentrate. She simply spoke unconsciously and skipped the words that she needed to say.

2. Reducing nervousness:

“(I) do not have lots of stress and reduce the nervousness symptom” (Male, #47).

3. Being mindful:

“(It) makes (me) be mindful (and) know myself what to do next. (It) makes (me feel) less nervous” (Male, #6).

4. Having positive feelings:

“Excellent...(It) reduces worry, nervousness, the tense (in the body), (and) increase confidence” (Male, #10).

“(I) feel more relaxed. Not much stressed” (Male, #40).

“(It) makes (me) feel relieved and less nervous” (Male, #53).

“It made (me) calmer when (I) went out to speak in front of the class” (Male, #27).

5. Reducing anxiety:

“(It made me) feel less anxious” (Male, #5). He explained that in the beginning, he could feel his heart beating in his chest, but after he practiced the mindful breathing, his awareness shifted to the stomach, so he felt less anxious.

6. Helping memorize things:

“(It) helps reduce nervousness and memorize the information” (Male, #42).

“(When I didn’t perform the mindfulness practice, I) could not concentrate and forgot things that I was going to say (Male, #33).

Another participant explained in the interview that it helped him remember what he was going to say.

The findings above parallel those of previous studies on mindfulness that indicated that it could have an effect on one’s emotions and levels of concentration (Chen et al., 2013; Song & Lindquist, 2015; Van der Riet et al., 2015). Moreover, mindfulness was found to “help memorize things.” This result was consistent with that of previous mindfulness studies that revealed that mindfulness practice improved working memory (Mrazek et al., 2013; Quach et al., 2016; Zeidan et al., 2010).

To answer research question #2, the data obtained from the closed- and open-ended question number 6 (Do you plan to use this mindfulness practice in the future? Why?) were analyzed using thematic content analysis. The results showed that 48 students (82.8%) reported that they planned to use the mindful breathing practice in the future, while only five students (8.6%) stated that they did not plan to use it. Four students (6.9%) thought that they might use the practice, and

one (1.7%) responded that he was unsure whether he would use it in the future. The quantified qualitative findings are displayed in Table 2.

TABLE II
STUDENTS’ PERSPECTIVES ABOUT USING THE MINDFULNESS PRACTICE IN THE FUTURE

Reasons for Using the Mindfulness Practice	Frequency	Percentage (%)
1. Having concentration	11	22.92%
2. Reducing nervousness	8	16.67%
3. Receiving benefits or positive effects	6	12.50%
4. Using on other occasions	6	12.50%
5. Speaking	4	8.33%
6. Being mindful	4	8.33%
7. Feeling confident	3	6.25%

According to Table 2, the students planned to use the mindfulness practice in the future because it helped them concentrate (22.92%) and reduced their nervousness (16.67%). Moreover, 12.50% said they would use it because the practice provided benefits or had positive effects. Another reason mentioned was that they could practice the mindfulness exercise on other occasions (12.50%), such as in stressful situations (2), presentations (2), communicating in the workplace (1), with “everything” (1), and that they also could use it when they have to speak in public (8.33%). Further, they indicated they would use it because the mindfulness made them more mindful (8.33%) and confident (6.25%).

Here are some examples from the open-ended question on the questionnaire and the interviews:

“(I will) use...(It) had a positive effect on speaking in front of a lot of people. (I) can use (it) when singing, project presentation, and others. (I) use (it) with me (and) friends (and) for speaking in daily life. (It) helps have courage for a talent show. (This) uses mindfulness a lot because if we face lots of problems, (it) may make being unmindful (and) being crazy from what (I) have seen. So, we should breathe in and out. Be mindful and face with things” (Male, #10).

“Mindfulness practice made the mind not wandering when we speak or do things in life. (I will) use it while driving to travel or in other (activities) in daily life” (Male, #17).

“(I will) use...because I don’t like to speak in front of the classroom. But, after practicing (the mindfulness), I felt (and) saw the result” (Male, #33). He said that he used to feel nervous, and could not communicate, but now he can speak, and does not pay attention to other things outside. He is more mindful, and because he practices before he comes to class, it helps him speak better. He was not distracted by friends in class, and sometimes when they looked at him, he did not even pay attention. Instead, he focused on the things that he had prepared to say. He indicated that he will use the mindfulness practice in other subjects as well, especially when he has to speak in

front of the classroom.

However, four students (6.9%) thought that they might use the practice, and one student (1.7%) responded that he was unsure whether he would use it in the future:

“No, (because) it does not help much” (Female, #2).

“No, (because) normally (I) do practice concentration meditation before starting doing important things in daily life often” (Male, #8).

“No, (because) not much effect on me” (Female, #16).

“No, did not affect much” (Female, #21).

“Not sure. (Because I) may forget to do the practice” (Male, #23).

The findings indicated there were two primary reasons to continue the mindfulness practices. The first was that the students planned to use them because of their positive effects. The second was that they planned to use mindfulness practices in other activities, such as presentations and communications, or when they faced a stressful situation. However, some students did not plan to use the practices. The reasons were varied, but most simply did not find that they had much effect.

V. CONCLUSIONS AND RECOMMENDATIONS

Overall, the results of the mindfulness training were promising. Firstly, all participants reported that they

benefitted from the training, for example, by having higher levels of concentration, being less nervous, and being mindful. Secondly, most of them would like to continue to use the mindfulness practice in the future, which suggests that it certainly can be used to help students speak in EFL classrooms. However, the students should be able to choose whether or not they want to participate in the practice. The instructor can give those who do not want to participate in the training some time to be alone and prepare in their own way before speaking.

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APPENDIX

The semi-structured interview questions were:

1. Can you explain, clarify, or give more details about this (statement)?
2. Can you explain or clarify this (word or statement)?
3. Can you tell me what happened during the mindfulness practice?
4. What happened in the past (when engaged in public speaking) before this mindfulness practice?
5. To what does this statement refer?