Conceptualizing Mindfulness for Health and Physical Educators

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ABSTRACT

Mindfulness is a form of focused attention on the present moment. Kabat-Zinn (2003) defined mindfulness as, "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (p. 145). There is promising evidence suggesting that mindfulness can be used as a valid practice or tool in education to promote an assortment of desired cognitive, social, and emotional outcomes for youth (Zoogman, Goldberg, Hoyt, & Miller, 2015). This type of learning modality can also help educators demonstrate student-learning outcomes associated with some of the health and physical education national standards (National Health Education Standards, 2016; Society of Health and Physical Educators, 2014). The purpose of this paper is to provide health and physical educators with a foundation in mindfulness theory, concepts, activities, and related resources. Interested readers should be able to pursue these concepts and ideas further by designing their own curriculum to use within the classroom.

Mindfulness, a type of contemplative practice, is defined as being aware of current experience and fully present in any day-to-day moment, without any judgment on whether current thoughts or feelings are good or bad (Bishop et al., 2004). As Kabat-Zinn (1994) noted, mindfulness is purposively "paying attention in a particular way: on purpose, in the present moment, nonjudgmentally" (p. 4). Mindfulness techniques offer great potential in helping an individual: increase focus/attention, regulate emotional events, develop deeper capacity for compassion, and reduce the amount of stress in their lives (Barbezat & Bush, 2014). There continues to be evidence that anxiety, depression, and stress are serious problems facing students (Dyrbye, Thomas, & Shanafelt, 2006). Mindfulness holds tremendous promise as a valid and useful tool in helping reduce undesirable social and emotional behavior within the teaching-learning paradigm of education. The purpose of the article is to provide health and physical educators with the theoretical and empirically-based underpinnings of mindfulness, as well as introducing strategies and activities that can be used to help students be more 'aware of' and 'present with' their learning. The activities and resources found in this article should be thought of as tools that novice-to-experienced teachers can use to design and implement mindfulness practices within their own classrooms. This manuscript is broken into three sections. Section one (Framing Mindfulness) provides an overview of some of the salient literature and supporting evidence surrounding mindfulness, including K-12 empirical outcomes from using these practices in the school environment. Section two (The ABC's of Mindfulness) covers the conceptual and theoretical underpinnings of mindfulness; discussed here are three of the more prominent pillars that frame these practices. Section three (Mindfulness Activities) entails the pragmatic lesson ideas and resources that teachers can use to start developing their own mindfulness curriculum.

Framing Mindfulness

Put simply, mindfulness is moment-to-moment awareness without judgment (Kabat-Zinn, 2003). "Mindfulness opens the mind and gives space for new understanding…" (Barbezat &

& Bush, 2014, p. 98). Practices associated with mindfulness can be designed to promote and cultivate greater ability for knowledge construction and help individuals to focus more attentively on the present here and now (Zoogman, Goldberg, Hoyt, & Miller, 2015). There is great potential for, and sound empirical evidence supporting the use of mindfulness in helping individuals decrease anxiety and improve mood (Hoffman, Sawyer, Witt, & Oh, 2010), reduce stress and rumination (Keng, Smoski, & Robins, 2011), and increase self-compassion while forming stronger interpersonal relationships (Barnes, Brown, Krusemark, Campbell, & Rogge, 2007; Birnie, Speca, & Carlson, 2010). The outcomes associated with practicing this form of meditation are becoming more widely acknowledged and accepted as an integral aspect of healthy living (Meiklejohn et al., 2012; Moore & Malinowski, 2009). Based upon this growing body of literature it seems plausible that using mindfulness techniques can be a relatively simple, yet effective means for maintaining physical and emotional health.

In recent years there has been a resounding surge in the popularity of mindfulness and the various effects these practices have on adults (de Vibe, Bjørndal, Tipton, Hammerstrøm, & Kowalski, 2012). However, advocates and researchers note that mindfulness is not solely intended for adults (Zoogman et al., 2015). Within K-12 education there is a growing body of literature depicting the potential benefit and practical application of including mindfulness practices as part of the school curriculum (Flook et al., 2008; Napoli, Krech, & Holley, 2005; Rosaen & Benn, 2006; Wall, 2005). Using mindfulness training for adolescents has been shown to decrease behavior problems and increase attention and focus (Bogels, Hoogstad, van Dun, de Schutter, & Restifo, 2008; Weijer-Bergsma, Frmsma, de Bruin, & Bogels, 2012). Zoogman et al. (2015) provided a meta-analysis of mindfulness interventions with youth participants. Findings from this twenty-article analysis pointed out that mindfulness was indeed a helpful intervention strategy for a variety of social, emotional, and academic measures. Other researchers contend that mindfulness training within K-12 has been shown to improve/strengthen an assortment of critical intrapersonal and interpersonal relationship skills, such as memory, attention, social skills, emotional regulation, and self-esteem (Meiklejohn et al., 2012). With the aforementioned comments in mind it is becoming increasing apparent that mindfulness techniques should be considered within the K-12 curriculum.

Mindfulness aligns very well with designed K-12 national standards. The learning outcomes associated with mindfulness directly align with National Health Education Standards 5 and 7: promoting healthy decision making and health enhancing behavior (National Health Education Standards, 2016). There is also tremendous potential for using mindfulness practices within physical education to help teachers demonstrate student-learning outcomes that are associated with the Society of Health and Physical Educators National Standard 4: responsible personal and social behavior (Society of Health and Physical Educators, 2014). Central to mindfulness in education is the idea that students can learn more readily if they can remain focused, calm, open-minded, and perceive their environment to be free from stressors. The next section will cover three tenets that play a large role in the practice of mindfulness, and in ultimately reaching desired health and wellness outcomes for teachers and students.

The ABC's of Mindfulness

An argument can be made that the building blocks or essential cornerstones of mindfulness are *attention*, *balance*, and *compassion* (i.e., the ABC's of mindfulness). Attention refers to having a 'gentle focus' and being keenly aware of the present moment. Focusing attention and being mindful sounds simple; however, the reality of being consciously aware of the present moment for any given amount of time can be quite difficult. To stay focused on the present moment without the mind 'wandering' to something that has happened in the past or something that is planned for the future can be a difficult task. Go ahead and give it a try. Close your eyes and see how long you can focus on, for example, your breath coming in and out of your body. Before long your mind will naturally start to wander to one thought and then another. This 'habitual chatter' is what one 'quiets down' when practicing the art of mindfulness. Increasing one's ability to stay focused and attentive can help reduce the 'habitual chatter' that can be a distraction in the learning process.

A critical skill for students to develop in order to stay on task and solve problems is consistent concentration and focus. Mindfulness can hone and refine attention (Jha, Krompinger, & Baime, 2007). There are numerous studies that have used mindfulness interventions to increase focus and attention (Chiesa & Serretti, 2009; Sedlmeier et al., 2012). In one such study, MacLean et al. (2010) discovered that mindfulness training can actually improve the efficiency in which the brain operates in

order to 'free up extra space' for increased attention. Cultivating greater attention is one element toward improved academic success.

Another outcome that mindfulness can achieve in an effort to help foster conducive learning environments for teachers and students is emotional stability, also known as equanimity. Equanimity can be thought of as having 'mental calmness' or a feeling of complete composure, especially in situations that might cause stress. Desbordes et al. (2015) defined equanimity as "an even-minded mental state or dispositional tendency toward all experiences or objects, regardless of their origin or their affective valence (pleasant, unpleasant, or neutral)" (p. 1). Emotional regulation is at the heart of balance within mindfulness. With emotional regulation one is consciously aware of his or her own affect and can react to situations of stress/demand in ways that are socially acceptable. These individuals have conscious control over their emotions (i.e., emotional and mindful balance). Thus, emotional balance or equanimity can be considered an emotion regulation strategy that can impact how, and to what degree an individual responds to a perceived emotional stressor (Desbordes et al., 2015).

There is empirical evidence suggesting that mindfulness can alter the brain in ways that help individuals improve their emotional balance (Goldin & Gross, 2010). Some studies show that mindfulness practices can help individuals complete tasks with equanimity even in emotionally stressful situations (Ortner, Kilner, & Zelazo, 2007). Emotional balance within the classroom is especially important when students are faced with situations that might cause them to panic (e.g., not answering a question correctly in front of the rest of the class or doing poorly on an exam), become socially fearful (e.g., working in a group, participating in teambuilding activities, or using an assortment of interpersonal skills while on a team), or any situation in which they need to regulate their emotions because of a perceived, external stressor. The ability to prevent oneself from being overwhelmed by circumstances that arise in the classroom can be a tremendously useful tool for students to develop. Not only is having the ability to regulate personal emotions important, being able to show care, concern, and compassion toward others is another cornerstone in establishing a healthy learning environment.

The third piece of the mindfulness picture is compassion. Compassion has three components: cognitive ("I understand what you're going through"), affective ("I feel your pain"), and motivational ("I want to help you"). Gratitude, empathy, loving-kindness, self-esteem, and social connection are all important intrapersonal and interpersonal relationship skills associated with compassion and supported within a mindfulness framework (Barbezat & Bush, 2014). With the rise of bullying, teasing, and other forms of social harassment in schools it becomes paramount that teachers create a learning environment that fosters supportive and nurturing interactions for all members of the classroom (O'Connor & Graber, 2014). There has been promising research associating mindfulness training with higher instances of compassion (Birnie, Speca, & Carlson, 2010). In one randomized control study Neff and Germer (2013) demonstrated significant self-compassion and well-being outcomes as a result from an 8-week mindfulness program. Shapiro, Brown, and Biegel (2007) maintained that mindfulness practices helped participant's lower stress while at the same time increased their capacity for self-compassion, both of which may be helpful as a preventative measure to thwart off depression (Nolen-Hoeksema, Morrow, & Fredrickson, 1993). Carson, Carson, Gil, and Baucom (2004) used a mindfulness intervention in their randomized controlled study and found improved interpersonal relationship benefits (e.g., high relatedness, closeness, and acceptance of one another) from establishing the contemplative practices. There appears to be a clear and ever-growing body of evidence illustrating the link of mindfulness to heighted levels of compassion, a behavioral trait that would be welcomed in any educational environment.

The work of Noddings (1992) that positioned care as an essential feature of the classroom also is a reminder of the importance for teachers to create a classroom community where acts of compassion are not only felt but, actively and purposively enacted by students. Through her extensive writing on an ethic of care, Noddings has championed the need for all educators to establish ways to infuse care into the classroom: whether it is through listening attentively to students, supporting student needs, modeling empathy around students, and/or identifying ways to demonstrate that students are meeting intended learning outcomes. By establishing care as a form of compassion, a teacher can build strong, appropriate teacher-student relationships that enhance the classroom community (Frank, 2013; Noddings, 1992). Developing the capacity for compassion allows for the development of a classroom where stu-

dents can nurture psychological well-being among themselves. Mindfulness practices hold the potential to promote exactly that, the possibility for loving-kindness (i.e., care, concern, and tenderness) among students to exist.

Attention, balance, and compassion (i.e., The ABC's of mindfulness) are some of the more salient features/outcomes associated with the practice of mindfulness. These three building blocks or cornerstones are desired traits to develop, especially for students who are growing, making mistakes, and learning their place within a larger society. While mindfulness has been shown to cultivate these elements of intrapersonal and interpersonal development, it also holds potential in allowing students the opportunity to explore their own personal meaning and value system. Barbezat and Bush (2014) eloquently pointed this out by stating, "meditation and introspection provide effective means for students to become aware of their emotions and reactions while at the same time helping them clarify what is personally most important" (p. 17). In supporting students' evaluation and examination of personal and moral values one might contend that mindfulness becomes spiritual or even religious in nature. One important caveat to note here is that, although mindfulness practices were originally developed as part of a religious tradition, teachers should not fear using such practices in the classroom, as they can be taught and utilized as purely secular activities designed to create space for enhanced learning opportunities.

Mindfulness Activities

Provided here are sample activities that can be implemented in health and physical education classrooms to help students develop the benefits associated with mindfulness. The intent of this section is to provide content/lesson ideas for teachers to utilize in developing their own mindfulness curriculum. Though important and briefly covered at times, the pedagogy surrounding the implementation of these activities does not fall within the scope of this paper. However, the content/lesson ideas summarized should be considered a starting point for K-12 and university instructors to design their own mindfulness lessons or curriculum. This section is divided into two categories: focused-attention activities that require *stillness* (calm and stationary positions) and focused-attention activities that require *movement* (mindful walking). It should be noted that these activities only represent a small 'sampling' of the totality of mindfulness practices from which teachers could choose to use within their own classrooms.

Stillness: Calm and stationary positions. Three different types of mindfulness practices will be covered under the category of calm and stationary positions: contemplative breathing, body scan, and harnessing the four elements. Contemplative breathing (adapted from Barbezat & Bush, 2014) is a useful introductory activity to help students start practicing the act of mindfulness. This activity it great to use at the start or end of a lesson to help students focus on a desired concept, topic or learning outcome that was or will be covered during the lesson. The following narrative in italics lists instructions to have students perform: *Sit comfortably in a position that allows you to be both relaxed yet alert at the same time. Now, gently close your eyes, leave them half-open, or gaze, unfocused at an object in the room. Take two-to-three slow, relaxed breaths. Now, focus and place attention on your breathing. This can be the air going into and out of your nose or even your chest or belly expanding and contracting. If at any time, you are distracted by a noise, thought, or feeling; acknowledge it, experience it, and then gently let this go and focus back on your breathing. Your mind will find it nearly impossible to stay focused on your breathing for even a short time – that's perfectly okay! The key is to realize that your mind wandered off and return back to focusing attention on your breathing.* After 1-2 minutes, ask students to move their focus from their breath to a question, topic, or lesson focus and repeat the same process. For example, have students focus on what they believe they were able to accomplish from the day's lesson. *Now, focus on what you thought you learned today or were able to accomplish successfully. When an answer comes up, acknowledge it, then go ahead and drop it. Drop the answer and continue to think deeper about what your accomplishments were. Try to come to a final answer in a short phrase or a few sentences. If your mind starts to wander no problem, no big deal, acknowledge you have wandered off topic and return to thinking about what you learned today.* After 1-3 minutes have students take 2-3 short, slow breaths and open their eyes. At this point the teacher can conduct a pair/share discussion, ask volunteers to share with the entire class, or move on to the next part of the lesson.

Body scan (adapted from Barbezat & Bush, 2014) is an activity that can help students become more attuned to several parts of their body. This practice is also an excellent tool to help students identify and release physiological stress. The body scan can be thought of as an

extension to contemplative breathing in that the teacher helps students to move focus from one part of the body to the next. As with the contemplative breathing have students find a relaxed yet alert position with eyes closed, and focus on breathing for about a minute (i.e., the same steps as contemplative breathing). Remember to remind the students that it is perfectly okay for the mind to start to drift or go off to another thought; the key is to acknowledge it and then gently return back to the focus on the breath. *Now, move your attention to the top of your head, ears, and the back of your head. Notice any sensations, or lack thereof in this region of your body.* For each body part or region, have students maintain focus for 30-seconds up to 2 -minutes, depending on time and preference. *Move your attention to your face, forehead, eyes, nose, and lips. Now, let's go ahead and focus on the neck and shoulders, as these areas tend to hold a lot of tension and stress.* After a few minutes (and focus on a few body parts) remind students: *If at any time, you are distracted by a noise, thought, or feeling, acknowledge it, experience it, and then gently let this go and focus back on your breathing. Your mind will find it nearly impossible to stay focused on your breathing for even a short time – that's perfectly okay! The key is to realize that your mind wandered off and return back to focusing attention on your breathing.* Depending on allotted time, a teacher can have students focus on a wide variety of body parts such as, the back, stomach, arms, legs, internal organs, and even the whole body at once.

Harnessing the four elements (adapted from Willard, 2014) is an activity that can help individuals practice focused attention, while remaining calm and relaxed in order to reduce stress and anxiety. This lesson idea requires knowing the four elements of western culture: earth, air, fire, and water. Have students sitting in a comfortable position with their eyes closed, or unfocused staring at an object in the room. Start with the element of earth. *Ladies and gentlemen go ahead and focus your attention on your feet touching the ground. The ground represents earth, a solid presence that will give you strength and stability. Focus on your strength and stability as you feel the earth beneath you.* For each element, allow students 1-3 minutes of focused attention before moving on to the next one. *Next comes the element of air. Now focus your attention to your breathing. Feel the air going in and out through your nose. The air holds the potential to be a powerful force. Air represents the independence and power of the mind, and with each breath you are consciously blowing away your stress, anxiety, and fears. Let us turn our attention to water. Take a moment and swallow. The act of swallowing represents water moving, wandering, and meandering down a path. Water represents your ability to reflect and think deeply about yourself, who you are and what your goals are in life. Finally, let us focus our attention on fire, deep within the core of our body. This element represents our confidence in rising above our challenges in life. Each element brings focus to important elements in our own life: earth for stability and strength, air for independence and power of mind, water for its reflective abilities, and fire for building within us confidence to overcome challenges.* Take 1-3 minutes and have students focus on all of these elements. *Ask yourself how you personally feel connected to each element, and whether you need more practice with any of these qualities.* After 1-3 minutes have students take 2-3 short, slow breaths and open their eyes. At this point the teacher can conduct a pair/share discussion, ask volunteers to share to the entire class, or move on to the next part of the lesson.

Contemplative breathing, body scan, and harnessing the four elements are three simple ideas for teachers to use to incorporate mindfulness within the classroom. Two great resources for designing activities/lessons for the classroom are: *Mindfulness for Teen Anxiety* (Willard, 2014) and *The Mindful Teen* (Vo, 2015). Both texts offer an assortment of pragmatic lesson ideas that can be easily modified/implemented in any school environment.

Movement: Mindful walking. Movement can also be used to focus students' attention. Although mindful walking will be the focus in this section, it should be noted that there are several physical activities in which mindfulness can be incorporated within health or physical education classes. Aikido, tai chi, yoga, and even surfing are physical movement forms that align with mindfulness practice that will not be covered within the scope of this paper; however, these movement forms hold tremendous potential for helping students further develop beneficial social and emotional outcomes. Walking meditation "brings close attention to the ordinary action of walking…" (Barbezat & Bush, 2014, p. 161). The importance of mindful walking is to bring acute focus to the muscles of the body, the movement of the legs and feet, the arms swaying, the balance that occurs with each step. Mindful walking de-emphasizes speed or competition in moving from one location to another; instead, the individual practices becoming fully aware of his or her body, and what they are doing moment-to-

moment (Barbezat & Bush, 2014). There are various forms of contemplative walking (see Live and Dare, 2016 for a list); with all the forms of walking meditation there are a few tips for teachers to consider. Slower, longer sessions tend to work best; however, 10—15 minutes is a good allotted time to start with for beginners. Before starting tell students to keep their eyes open, stand with their feet shoulder-width apart, and balance weight evenly on both feet. Have students take a couple of slow, deep breaths so that they can feel relaxed yet alert. Remind students, *if at any time, you are distracted by a noise, thought, or feeling, acknowledge it, experience it, and then gently let this go and focus back on your breathing. Your mind will find it nearly impossible to stay focused on your breathing for even a short time – that's perfectly okay! The key is to realize that your mind wandered off and return back to focusing attention on the technique being practiced.* The two techniques of contemplative walking that will be mentioned in this section are: Thich Nhat Hanh and Zen (a.k.a. kinhin) walking, because they are arguably two of the easier forms to pick up. With Thich Nhat Hanh walking (adapted from Live and Dare, 2016), mention to students that this form of walking uses affirmations to produce positive emotional balance (i.e., greater equanimity). Students will walk slowly, focusing on their breathing, and bringing attention to the present moment. They will silently repeat the following phrases (in italics) as they focus on their breathing: breathing in *I have arrived*; breathing out *I am home*. Breathing in *I am here*; breathing out *I am present*. Breathing in *I am solid*; Breathing out *I am free*. The key is to provide students with an opportunity to choose to be in the present moment, instead of having them dwell on the past (e.g., the latest gossip they heard at lunch) or what they plan to do in the future (e.g., going to a friend's house after school).

Zen walking or kinhin (adapted from Live and Dare, 2016) occurs in a clockwise motion around a room or outside area. Teachers can start with providing students with the aforementioned tips (listed above) for mindful walking. Then, have students position their eyes about four to six feet in front on the ground. Remind students about safety and being aware not to bump into another student. Students will take one small step (~1-2 feet) for each breath (inhalation and exhalation). The focus will remain with syncing the breath with the step in unison. If the teacher would like to modify this technique they can have students switch from the *focused-attention* of the breath/step to *open-awareness*, where the focus shifts to experiencing all aspects of walking (e.g., movement of each muscle, parts of the body, feet touching and leaving the ground, mental thoughts, emotional feelings, awareness of outside sensations such as the wind or noise coming from the environment). In essence this modification aligns with *mindfulness walking* (Live and Dare, 2016), where being open and aware of the totality of the walking experience is the main goal rather than the focused-attention of the breath and step.

Resources and Concluding Remarks

There are an assortment of mindfulness tools/methods that teachers can use to help students cultivate deeper awareness, concentration, and insight (Barbezat & Bush, 2014). These tools/methods hold great potential in helping create environments that are conducive to learning. The goal of using mindfulness activities in the classroom setting is to have students who come away with a better understanding of *self*, as well as targeted learning outcomes. Table 1 lists over twenty different resources (including apps, articles, books, videos, and websites) for educators interested in learning more about mindfulness. These resources offer a variety of techniques, tips, lessons, web links, and research-based literature to expand anyone's mindfulness repertoire (See Table 1, p.21).

Incorporating mindfulness practices as part of a health and physical education curriculum holds tremendous promise for students. The purpose of mindfulness is to help individuals become more aware of the present here-and-now, nonjudgmentally, and with loving-kindness that can permeate to others. Mindfulness has been linked to an assortment of social and emotional learning benefits such as lower levels of anxiety and stress, better emotional regulation and equanimity, higher focus and attention, and increases in overall production on learning tasks. Whether mindfulness is used as a short brain-break activity for a couple of minutes in class or as a series of lessons within the larger scope of an entire unit, the evidence supporting its use and benefits seems promising enough for teachers to take notice and embrace it.

References

Barbezat, D. P., & Bush, M. (Eds.). (2014). *Contemplative practices in higher education: Powerful methods to transform teaching and learning*. San Francisco, CA: Jossey-Bass.

Barnes, S., Brown, K. W., Krusemark, E., Campbell, W. K., & Rogge, R. D. (2007). The role of mindfulness in romantic relationship satisfaction and responses to relationship stress. *Journal of Marital and Family Therapy, 33*, 482-500. doi:10.1111/j.1752-0606.2007.00033.x

Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). *Stress & Health, 26*(5), 359-371. doi:10.1002/smi.1305

Bishop, S., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., Devins, G. (2004). Mindfulness: A proposed operational definition. Clinical Psychology: Science and Practice, 11 (3), 230-241. doi:10.1093/clipsy/bph077

Bogels, S., Hoogstad, B., van Dun, L., de Schutter, S., & Restifo, K. (2008). Mindfulness training for adolescents with externalizing disorders and their parents. *Behavioural and Cognitive Psychotherapy, 36*, 193-209.

Carson, J. W., Carson, K. M., Gil, K. M., & Baucom, D. H. (2004). Mindfulness-based relationship enhancement. *Behavior Therapy, 35,* 471–494.

Chiesa, A., & Serretti, A. (2009). Mindfulness-based stress reduction for stress management in healthy people: A review and meta-analysis. *The Journal of Alternative and Complementary Medicine, 15*(5), 593–600.

Desbordes, G., Gard, T., Hoge, E. A., Holzel, B. K., Kerr, C., Lazar, S. W., et al. (2015). Moving beyond mindfulness: Defining equanimity as an outcome measure in meditation and contemplative research. *Mindfulness* 6, 356-372. doi: 10.1007/s12671-013-0269-8

de Vibe, M., Bjørndal, A., Tipton, E., Hammerstrøm, K. T., & Kowalski, K. (2012). Mindfulness-based stress reduction (MBSR) for improving health, quality of life and social functioning in adults. *Campbell Systematic Reviews, 3*. doi:10.4073/csr.2012.3

Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Academic Medicine, 81*(4), 354-373.

Flood, L., Smalley, S. L., Kitil, M. J., Dang, J., Cho, J., Kaiser-Greenland, S., Locke, J. & Kasari, C. (2008, April). A mindful awareness practice improves executive function in preschool children. Poster presented at the Center for Mindfulness in Medicine, Health Care, and Society 6th Annual Conference, Worcester, MA.

Frank, L. (2013). *Journey toward the caring classroom: Using adventure to create community in the classroom* (2nd Ed.). Oklahoma City, OK: Wood 'N' Barnes Publishing.

Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness--based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion, 10*(1), 83.

Hoffman, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analysis. *Journal of Consulting and Clinical Psychology, 78*(2), 169-183. doi:10.1037/a0018555

Jha, A. P., Krompinger, J., & Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective, & Behavioral Neuroscience, 7*(2), 109–119.

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144-156. doi:10.1093/clipsy/bpg016

Keng, S., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Journal of Consulting and Clinical Psychology, 31*(6), 1041-1056. doi:10.1016/j.cpr.2011.04.006

Live and Dare. Retrieved August 6, 2016 from www.liveanddare.com/walking-meditation/

References Continued

MacLean, K. A., Ferrer, E., Aichele, S. R., Bridwell, D. A., Zanesco, A. P., Jacobs, T. L., Saron, C. D. (2010). Intensive meditation training improves perceptual discrimination and sustained attention. *Psychological Science, 21*(6), 829-839. doi:10.1177/0956797610371339.

Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., Saltzman, A. (2012). Integrating mindfulness training into K-12 education: Fostering the resilence of teachers and students. *Mindfulness, 3*(4), 291-307. doi: 10.1007/s12671-012-0094-5.

Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition, 18*, 176-186. doi:10.1016/j.concog.2008.12.008.

Napoli, M., Krech, P., & Holley, L. (2005). Mindfulness training for elementary school students: The attention academy. *Journal of Applied School Psychology, 21*(1), 99-125.

National Health Education Standards. Retrieved August 10, 2016 from http://www.cdc.gov/healthyschools/sher/standards/index.htm.

Neff, K. D., & Germer, C. K. (2013). A Pilot Study and Randomized Controlled Trial of the Mindful Self--Compassion Program. *Journal of Clinical Psychology, 69*(1), 28–44.

Noddings, N. (1992). The challenge to care in schools: An alternative approach to education. New York, NY: Teachers College Press.

Nolen-Hoeksema, S., Morrow, J., & Fredrickson, B. L. (1993). Response styles and the duration of episodes of depressed mood. *Journal of Abnormal Psychology, 102,* 20–28.

O'Connor, J. A., & Graber, K. C. (2014). Six-grade physical education: An acculturation of bullying and fear. Research Quarterly for Exercise and Sport, 85(3), 398-408. doi:10.1080/02701367.2014.930403

Ortner, C. N., Kilner, S. J., & Zelazo, P. D. (2007). Mindfulness meditation and reduced emotional interference on a cognitive task. *Motivation and Emotion, 31*(4), 271–283.

Rosaen, C., & Benn, R. (2006). The experience of transcendental meditation in middle school students: A qualitative report. *Explore, 2*, 422-425.

Sedlmeier, P., Eberth, J., Schwarz, M., Zimmermann, D., Haarig, F., Jaeger, S., & Kunze, S. (2012). The psychological effects of meditation: A meta-analysis. *Psychological Bulletin, 138*(6), 1139.

Shapiro, S., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology*, 1, 105-115. doi:10.1037/1931-3918.1.2.105

Society of Health and Physical Educators (2014). National standards and grade-level outcomes for K-12 physical education. Champaign, IL: Human Kinetics.

Vo, D. X. (2015). *The mindful teen: Powerful skills to help you handle stress one moment at a time*. Oakland, CA: New Harbinger Publications.

Wall, R. (2005). Tai Chi and mindfulness-based stress reduction in a Boston Public Middle School. *Journal of Pediatric Health Care, 19*(4), 230-237.

Weijer-Bergsma, E. V., Frmsma, A. R., de Bruin, E. I., & Bogels, S. (2012). The effectiveness of mindfulness training on behavioral problems and attentional functioning in adolescents with ADHD. *Journal of Child and Family Studies, 21* (2), 775-787.

Willard, C. (2014). Mindfulness for teen anxiety: *A workbook for overcoming anxiety at home, at school, and everywhere else.* Oakland, CA: New Harbinger Publications, Inc.

Zoogman, S., Goldberg, S. B., Hoyt, W. T., & Miller, L. (2015). Mindfulness interventions with youth: A meta-analysis.

TABLE

Table 1. Twenty Mindfulness Resources

Apps (for your phone or tablet)

Calm

Flipboard (mindfulness topic)

Headspace

Insight Timer

Stop, Breathe & Think

The Mindfulness App

Books

Anh-Huong, N., & Hanh, T. N. (2006). *Walking meditation*. Boulder, CO: Sounds True.

Broderick, P. (2013). *Learning to breathe*. Oakland, CA: New Harbinger Publications.

Kabat-Zinn, J. (2012). *Mindfulness for beginners*. Boulder, CO: Sounds True.

Rezvan, A. (2014). *25 lessons in mindfulness: Now time for healthy living*. Washington, DC: American Psychological Association.

Vo, D. X. (2015). *The mindful teen: Powerful skills to help you handle stress one moment at a time.* Oakland, CA: New Harbinger Publications.

Research-based Articles

Metz, S. M., Frank, J. L., Reibel, D., Cantrell, C., Sanders, R. & Broderick, P. C. (2013). The effectiveness of the learning to BREATHE program on adolescent emotion regulation. *Research in Human Development, 10*(3), 252 - 272. doi:10.1080/15427609.2013.818488

Schonert-Reichl, K. A., & Lawlor, M. S. (2010). Effects of a mindfulness-based education program on pre- and early adolescents' well-being and social and emotional competence. *Mindfulness, 1*(3), 137-151. doi:10.1007/s12671-010-0011-8

Zoogman, S., Goldberg, S. B., Hoyt, W. T., & Miller, L. (2015). Mindfulness interventions with youth: A meta analysis. *Mindfulness, 6*(2), 290-302. doi:10.1007/s12671-013-0260-4

Videos

Jon Kabat-Zinn on Mindfulness (60-Minutes) at http://www.cbsnews.com/news/mindfulness-anderson-cooper-60-minutes/

9 Mindfulness videos at http://mrsmindfulness.com/9-mindfulness-videos/

UCLA Mindful Awareness Research Center videos at http://marc.ucla.edu/body.cfm?id=100

Websites

www.mindfulschools.org

www.liveanddare.com/types-of-meditation

www.valleymindfulness.com

www.beginnerstaichi.com