

The Virginia Journal



Virginia Association for
Health, Physical Education,
Recreation, and Dance

SPRING 2018

Vol. 39, No. 1



Photo Credit: Michael Moore

Mindfulness Matters: Implementing Mindfulness Strategies and Practices in Physical Education

Erin Ruddy, M.A.T., is a recent graduate of the PHETE program in the Department of Kinesiology at James Madison University, Harrisonburg, Virginia

Cathy McKay, Ed.D., CAPE, is an Assistant Professor in the Department of Kinesiology at James Madison University, Harrisonburg, Virginia

Students today have many competing demands on their attention. They have pressure to do well academically, pressure to compete in the social realm, and pressure in managing day-to-day situations, problems, and commitments both inside and outside of school (Albrecht, Albrecht, & Cohen, 2012; Ball, Foust, & Rochester, 2014; Chen & Sherman, 2013). Due to constant multi-tasking and thinking ahead, students are experiencing mental pressure resulting in mental strains, or stress, that can lead to mental health problems (Albrecht et al., 2012; Mulhearn, Kulinna, & Lorenz, 2017). According to the American Psychiatric Association (2000), a mental disorder or mental illness affects a person's thinking, emotional state, and behavior as well as disrupts the person's ability to work or carry out other daily activities and engage in satisfying personal relationships. Research has found that anxiety disorders are among the most common mental health challenges that occur in children and youth (Kessler, Chiu, Demler, & Walters, 2005) and depression is the most common mental health problem experienced by youth aged 12-25 years (Albrecht et al., 2012). This becomes especially problematic if left untreated, as these problems become risk factors for alcohol and other drug abuse, as well as suicidal thoughts and actions (McGorry, Purcell, Hickie, & Jorm, 2007).

Therefore, there is a pressing need to have a reflective, mindful, thoughtful component in our physical education programs, as mindfulness practices have been found to relieve anxiety and depression in youth (Lu, 2012). Providing students with a variety of practices to be mindful on a regular basis enables them to experience a form of education that enhances their overall well-being. Students cannot be successful if they are not mindful (Ball et al., 2014). Thus, implementing mindfulness practices in physical education will result in: (1) improved student behaviors, including problem solving, coping, and communication skills; (2) improved management of stress; (3) enhanced self-knowledge and self-acceptance; (4) improved student engagement and cognitive performance; and (5) reduced time spent on classroom management and student misbehavior (Albrecht et al., 2012; Mulhearn et al., 2017). The purpose of this manuscript is to define mindfulness, and provide teachers with mindfulness strategies and practices to be implemented in physical education programs.

What is Mindfulness?

Mindfulness is a strategy that is being used with increased frequency and receiving mainstream acceptance around the world as a means to enhance both students' and teachers' overall wellbeing (Albrecht et al., 2012; Mulhearn et al., 2017). Mindfulness is conscious living. It is paying attention with specific purpose, in the present moment, and without judgement (Shapiro, Carlson, Astin, & Freedman, 2006). Mindfulness

can be regarded as a philosophy or skill to foster body-mind oneness and, ultimately, to achieve true health (Lu, 2012). To further understand mindfulness, it is important to understand mindlessness. Mindlessness is commonly referred to as, being in "auto-pilot," going through the motions of routine but not fully experiencing or attending to the present situation. According to Langer (1989), the destructive nature of mindlessness is depicted in three aspects: (1) being trapped by categories that were created in the past; (2) operating under automatic behavior (being unaware of what one is doing); and (3) acting from a single perspective that lacks any impartial objectivity or judgment. Teachers constantly tell students to "pay attention," but very rarely teach them the skills on how to do so. Therefore, students need to be taught the skill set that enables their engagement in the present moment. The implementation of mindfulness practices can develop a strong sense of attention and concentration in students, which are key skills in the learning process (Ball et al., 2014).

In recent years, psychologists have turned their attention to defining and providing a theoretical model for mindfulness in order to create a common framework for implementation. Shapiro et al. (2006) propose three components that are comprised in a mindfulness practice: *intention*, *attention* and *attitude*. The components are not sequential, but rather are engaged simultaneously in the process of mindfulness practice (Albrecht et al., 2012; Shapiro et al., 2006). Intention, or an individual's vision, is seen as an integral first step in mindfulness practice. The intention of the practice is instrumental in determining the outcomes or benefits received from the practice (Shapiro et al., 2006). Attention, refers to paying attention in the moment to your internal and external experience. It involves suspending judgement and observing the changing field of thoughts, feelings, and sensations as they occur in the mind-body (Shapiro et al., 2006). Attitude involves the qualities an individual brings to their attention. It involves attending to internal and external experiences without evaluation or interpretation while also being in a mindset of loving kindness—even if what is occurring is contrary to deeply held wishes or expectations (Shapiro et al., 2006). Consequently, the three components of mindfulness represent the foundation that guides all mindfulness practices. Table 1 outlines the components of mindfulness, including examples that PE teachers may like to try in their own daily lives.

Mindfulness Practice: "Mindfulize" Physical Activities & Assessments

Teachers tend to lead (and even rush) students to reach the teaching expectations or objectives that have been planned, but don't usually remind students to appreciate the process of learning

Table 1

Components of Mindfulness		
Component	Explanation	Example
1. Intention	The intention to practice mindfulness and return to your object of focus.	“I am going to sit here and pay attention to my breath; when I notice myself getting distracted, I will turn back to the breath.”
2. Attention	Pay attention to what is happening right now.	“I am breathing in; I am breathing out.”
3. Attitude	Having an attitude that is non-judgmental, patient, and kind.	“I got distracted again! Well, that’s okay, I’ll just try again.”

Table 2

Mindfulness Assessments					
#	Item	1 (rarely)	2 (sometimes)	3 (fairly often)	4 (almost always)
1	I notice the sensation of my body moving or sweating when I am jogging.				
2	I notice the sensation of my muscles while I am stretching.				
3	I am aware of my feelings and emotions without strong reactions to them.				
4	I pay attention to what I am doing, and do not feel I must go, go, go.				
5	I do not rush through physical activities.				
6	I am not easily distracted.				
7	I am aware of my surroundings (layout of the gym, plants & trees outside).				
8	I think it is acceptable to make mistakes while learning physical activities.				
9	I can experience the present moment: <i>here</i> and <i>now</i> .				

itself. While a goal-oriented practice may be productive, it often comes at the cost of generating psychological problems for students (e.g., excess anxiety and stress), in addition to creating a mindless mentality (Lu, 2012). As the majority of existing physical activities in school are not particularly mindfully oriented, it is vital for teachers to “mindfulize” them for students (Lu, 2012). Students should be encouraged to develop *mirror-thought*—to appreciate whatever they are presently experiencing, whether it be errors in learning, breathlessness in running, noises in ball bouncing, or the enjoyment of a particular sensation—rather than simply employing the skills to run faster, jump higher, or become stronger (Lu, 2012). In order to “mindfulize” activities three fundamental principles should be applied: (1) try sincerely to do every unique action in its own unique movement; (2) try to be aware of what we are doing and not rush through the process; and (3) try to pay attention to breathing in all physical activities, because the mere practice of conscious breathing helps return to

the present moment (Mulhearn et al, 2017).

Furthermore, students’ subjective feelings, emotions, and enjoyment are critical to fostering a healthy active lifestyle (Lu, 2012). Therefore, students’ subjective experiences should be assessed by the students themselves. Ongoing mindfulness assessments in physical education provide students with the opportunity to be self-reflective and encourage students to be mindful and engaged in the present moment while enjoying the learning process. A sample list of mindfulness assessments provided in Table 2 can be expanded upon to create checklist and rubric types of assessments for children and youth.

Mindfulness Practice: Meditation

Meditation is a powerful and uplifting practice that can lead to a better quality of life (Ball et al., 2014). Although the practice of meditation is thousands of years old, research on its health benefits is relatively new. Meditation has been found to provide

as much relief from some anxiety and depression symptoms as antidepressants (Goyal, Singh, Sibinga, Gould, Rowland-Seymour, Sharma, & Haythornthwaite, 2014). Meditation can help quiet the chatter inside students' heads and bring them back to present moment tasks by refocusing their attention on their bodies and breath.

Meditation practice allows students to attend to the thoughts or feelings that come up in their mind, without ignoring, suppressing, analyzing, or judging the content. Meditation encourages students to simply note the thoughts as they occur, and observe them intentionally but nonjudgmentally, moment-by-moment, as events in their field of awareness. The awareness of thoughts coming and going in the mind can lead students to feel less caught up in them, and provide them with a deeper perspective on their reactions to everyday stress and pressures (Mulhearn et al., 2017).

The beauty and simplicity of meditation is that you don't need any equipment. All that is required is a quiet space and a few minutes each day. Table 3 provides meditation practices with descriptions and cues that can be led by teachers and performed by students in a physical education setting. Furthermore, guided meditations are available through apps like *HeadSpace* and online through the *Chopra Center*.

Mindfulness Practice: Yoga

Research confirms that students perform better in school when they are emotionally and physically healthy (Cathcart,

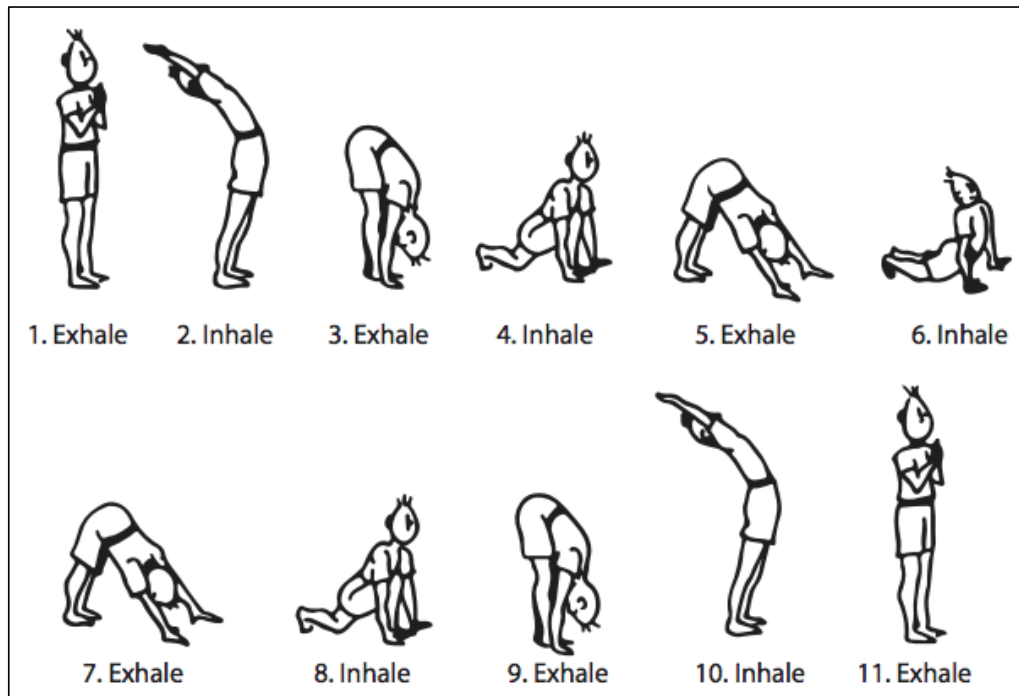
2006). Yoga is a sophisticated system for achieving radiant physical health, mental clarity and peace of mind (Cathcart, 2006). Adding yoga to a school's curriculum will help provide a quality physical education program that is consistent with the National Standards for Physical Education (Society of Health and Physical Educators, 2014). Yoga is a specific system of personal development that increases strength and flexibility; promotes health, well-being, and emotional stability; and helps all individuals who practice consistently and correctly to reach their highest potential (Cathcart, 2006). In a pilot study of students in second and third grade, students were provided 30-minute yoga sessions once a week for 10 weeks (Butzer, Day, Potts, Ryan, Coulombe, Davies, & Khalsa, 2015). Over the 10-week program, statistically significant changes were seen in students from both grades in the areas of social interaction, attention span, cortisol concentration, time on task, academic performance, stress coping, confidence, and overall mood (Butzer et al., 2015). The greatest change was recorded in the behavioral elements for the second graders (Butzer et al., 2015).

Yoga is a movement-focused form of breath and body awareness, and it is often included within mindfulness practices (Mulhearn et al., 2017). There are many different approaches to yoga; however, the aspects of yoga are generally referred to as Hatha yoga, which includes exercises and postures, breathing, and sometimes meditation (Cathcart, 2006). Yoga involves little to no equipment and physical educators can implement yoga as warm up and cool down activities, or even as an entire unit of

Table 3

Practice	Description	Verbal Cues	When to Use	Purpose
1. Skill Visualization	Students take a few breaths, check in with their body, and visualize themselves performing a skill.	Where do you feel your breath? Can your picture yourself doing the skill correctly?	Before trying a new skill.	Set the intention for class. Decrease over-hype. Calm nerves for anxious students.
2. Activity Reflection	Students sit or lie down and notice how their body feels after exercising.	How does your body feel now? How did you do today? How does your mind feel?	After an activity, or at the very end of class.	Reflection time. Learn physical body awareness. Recognize emotions connected to events.
3. Breath awareness	Students sit or lie comfortably and begin noticing their breath.	Notice where you feel your breath (nose, belly, chest). Are you breathing fast or slowly?	Anytime. This practice can be used at any point of the day during activity.	Notice the breath-body connection. This is important for monitoring exercise intensity, as well as anxiety and anger arising.
4. Body scan	Students lay down. Go through each part of the body and notice how it actually feels. They can even contract the muscles in that area for a brief moment before relaxing fully.	When you breath in, feel if there is tension in this part of the body; when you breath out, see if you can relax and let the floor hold you.	Anytime you want students to remember to focus on the physical body. This is a great way for them to notice how exercise benefits their muscles.	Body awareness. Students need to notice the difference between tense muscles and relaxed muscles. Earlier recognition of the source of their tension/anger.

Figure 4



instruction. For example, teachers can have students perform three or four sun salutations (Figure 4) as a warm up or cool down activity. Sun salutations are a traditional series of yoga poses that link movement and breath and engage all major muscles of the body (McGonigal, 2010). Furthermore, many yoga poses done with younger children incorporate animal themes that can be infused in storytelling, music, games, poetry, songs, and art (Cathcart, 2006). Yoga for middle and high school students could be a unit plan or a 45 to 60 minute class beginning with breathing exercises, followed by a challenging flow, a strength and balance component, and finishing with deep stretching and relaxation (Cathcart, 2006). Yoga poses and flows are available through apps like *Simply Yoga* and online through the *Yoga Journal*.

Mindfulness Practice: Tai Chi

Tai Chi is a mind-body exercise that combines the principles of martial arts movements with Qi or (Chi) circulation, controlled breathing, and stretching exercises (Chen & Sherman, 2013). Its potential benefits for mood control and reduction of violence have wide appeal for policy makers and educators (Chen & Sherman, 2013).

Tai Chi is about balance, both in movement and as a way of life. Tai Chi is often called a “moving meditation” because the movements are performed slowly, quietly, and continuous with minimal muscle tension and exertion (Chen & Sherman, 2013). The slow motion of the movements requires mental control, which, in turn may block out other competing thoughts and distractions, allowing the mind to escape from daily routines (Chen & Sherman, 2013). Tai Chi can be implemented using a 24 Step Beijing Short Form (Table 5). Physical educators should teach each form by breaking it down into several small steps, then teaching each small step in a logical progression. The step

by step progression is important because there is a need to further break down each step into hand postures, foot postures, and eye movements.

Tai Chi movement offers rich metaphors for living a happy life. A metaphor is a way of thinking, an image that once captured by the mind can guide our action to its destination (Chen & Sherman, 2013). For example, “Slow and sure wins the race.” Slow motion is the basis of Tai Chi exercise. Underlying the slow and even motion is the power of mental control and mindfulness, which are essential for achievement and happiness in our life (Chen & Sherman, 2013). Physical educators can implement Tai Chi as warm up or cool down activities or as an entire unit of instruction. Tai Chi requires minimal equipment or investment to implement, and can be performed anywhere, indoors or out. Easy to understand illustrations and explanations for the 24 Step Beijing Short Forms are available through apps like *Tai Chi for Beginners—24 Form* and through texts like *Tai Chi Essentials* by Andrew Townsend.

Conclusion

Research on mindfulness is booming in health science and medicine, particularly in psychological studies conducted over the past decade (Albrecht et al., 2012; Lu, 2012; Mulhearn et al., 2017). The problems of mindlessness and the benefits of mindfulness have been identified in general society, in general education and in physical education (Ball et al., 2014). As mental health problems continue to increase in children and youth, it is critical for educators to take progressive steps towards integrating mindfulness into physical education programs. Therefore, the strategies and practices presented in this manuscript offer physical educators the opportunity to provide students with the necessary skills and experiences that will enhance their learning,

Table 5

The 24-Step Beijing Short Form
1. Commencing Form
2. Part the Wild Horse's Mane to Left and Right
3. White Crane Spreads Its Wings
4. Brush Knee and Twist Step on Both Sides
5. Strum the Lute
6. Step Back and Whirl Arm on Both Sides (Repulse Monkey)
7. Grasp the Bird's Tail to the Left
8. Grasp the Bird's Tail to the Right
9. Single Whip
10. Wave Hands Like Clouds to the Left
11. Single Whip
12. High Pat on Horse
13. Kick with Right Heel
14. Strike Opponent's Ears with Both Fists
15. Turn and Kick with Left Heel
16. Squat Down and Stand on One Leg—Left Style
17. Squat Down and Stand on One Leg—Left Style
18. Pass the Shuttle Left and Right
19. Needle at the Bottom of the Sea
20. Flash the Arms
21. Turn to Strike, Parry, and Punch
22. Draw Back and Push
23. Cross Hands
24. Closing Form

overall well-being, and quality of life.

References

- Albrecht, J. N., Albrecht, M. P., & Cohen, M. (2012). Mindfully teaching in the classroom: A literature review. *Australian Journal of Teacher Education, 37*(12):1-14.
- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders: DSM-IV-TR. Washington DC: American Psychiatric Association.
- Ball, J., Foust, C., & Rochester, C. (2014). Mindfulness practice in the classroom and gym: Making a real impact in student learning. *Colorado Association for Health, Physical Education, Recreation, and Dance, 40*(1):9-14.
- Butzer, B., Day, D., Potts, A., Ryan, C., Coulombe, S., Davies, B., & Khalsa, S.B. (2015). Effects of a classroom-based yoga intervention on cortisol and behavior in second and third-grade students: A pilot study. *Journal of Evidence-Based Complementary & Alternative Medicine, 20*, 41-49.
- Cathcart, T. (2006). Implementing yoga into physical education curriculum. *The Pennsylvania State Association for Health, Physical Education, Recreation, and Dance, 11*(2):58-61.
- Chen, D. D., & Sherman, P. C. (2013). Teaching balance with Tai Chi: Strategies for college and secondary school instruction. *Journal of Physical Education, Recreation & Dance, 73*(9):31-7.
- Goyal, M., Singh, S., Sibinga, E. M. S., Gould, N.F., Rowland-Seymour, A., Sharma, R., & Haythornthwaite, J.A. (2014). Meditation programs for psychological stress and well-being: A systematic review and meta-analysis. *JAMA Internal Medicine, 174*(3), 357-368.
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E.E. (2005). Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the national comorbidity survey replication (NCS-R). *Archives of General Psychiatry, 62*(6): 617-627.
- Langer, E. (1989). *Mindfulness*. Reading, MA: Addison-Wesley.
- Lu, C. (2012). Integrating mindfulness into school physical activity programming. *Teaching and Learning, 7*(1), 37-46.
- McGonigal, K. (2010). The sun salutation decoded: Learn surya namaskar. *Yoga Journal*. Retrieved from <http://www.yogajournal.com/article/beginners-sequences/shine/>
- McGorry, P. D., Purcell, R., Hickie, I. B., & Jorm, A. F. (2007). Investing in youth mental health is a best buy. *Medical Journal Australia, 187*(7), S5-7.
- Mulhearn, S. C., Kulinna, H. P., & Lorenz, A. K. (2017). Harvesting harmony: Mindfulness in physical education. *Journal of Physical Education, Recreation & Dance, 88*(6), 44-50.
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*(3), 373-386.
- Society of Health and Physical Educators. (2014). *National Standards & Grade-Level Outcomes for K-12 Physical Education*. Reston, VA: Author.